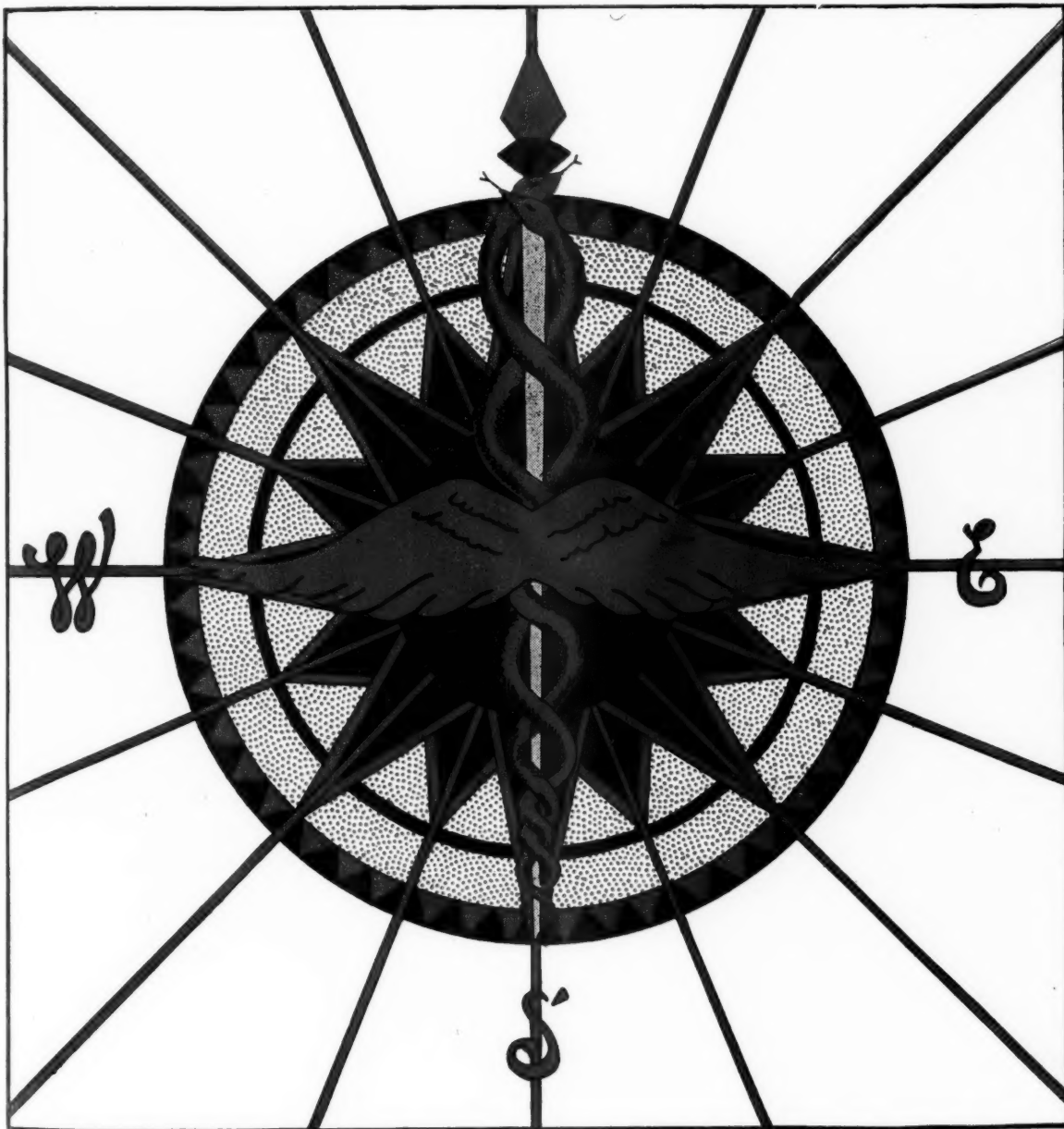


THE JOURNAL

OF THE
Michigan State Medical Society

Directory Number



Volume 46

JULY, 1947

No. 7

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JULY

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*Morton, D. J., "The Human Foot" (page 175), Columbia University Press, 1935.

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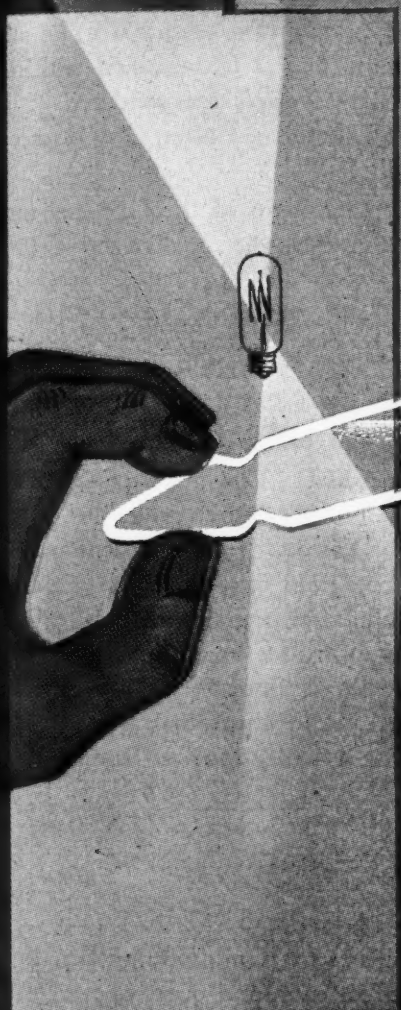
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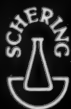
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You and Your Business

MSMS ANNUAL SESSION—GRAND RAPIDS September 23-26, 1947

Doctor, you are cordially invited—you are urged—to attend the 82nd Annual Session of your State Medical Society, in Grand Rapids next September. Hotel reservation blank will be found on Page 838.

The Program (and what a Program!) appears on Page 822.

The Pere Marquette Streamliners offer convenient transportation for those physicians who reside in the southeastern part of the state as the MSMS Program has been arranged from Tuesday noon to Friday noon, September 23-26. Arrange your railroad reservations as early as possible.

A QUARTER MILLION DOLLARS LOST TO MICHIGAN PHYSICIANS

If Michigan Doctors of Medicine fail to bill the Michigan Crippled Children Commission *direct* for medical treatment of afflicted and crippled children, they are insuring that a sum approximating \$250,000 per annum is lost to them.

The 1947 Michigan Legislature amended both the Afflicted and the Crippled Children Acts so that "any physician or surgeon except residents treating any such child at any hospital . . . shall bill the Commission for compensation as fixed by the Commission and paid by a separate warrant drawn to his order. . . . "Professional fees shall not exceed \$90 for a major operation and in no case shall surgical and/or medical fees exceed \$200 to any one doctor for any one patient in a twelve-month period. Said . . . physician shall make and file with the Commission affidavits containing *itemized* statements of such services rendered. . . . The compensation as fixed and approved by the Commission shall be paid to the physician or surgeon performing the services hereunder by a separate warrant drawn to his order and forwarded to him at his professional address. . . ."

The new features of the Afflicted and Crippled Children Laws are:

- (a) the doctor shall send *itemized bills direct* to the Crippled Children Commission (not through the hospital, as in the past).

- (b) The Auditor General forwards the doctor's check for services to his professional address (not to the hospital, as in the past).

- (c) The top limitation on medical fees is \$90 (not \$75, as in the past). It to be stressed that the Commission is to be billed within sixty days of the date services are rendered. Bills received by the Commission after sixty days cannot be paid legally.

The new amendments to the Crippled and Afflicted Children Acts become effective October 11, 1947.

S. 545 (TAFT-BALL-SMITH-DONNELL HEALTH BILL), ENCOURAGES VOLUNTARY MEDICAL PLANS

E. F. Sladek, M.D., Traverse City, Chairman of the MSMS Council, represented the Michigan State Medical Society at the hearings on S. 545 in Washington, June 6. The Taft Health Bill would aid voluntary prepaid medical care plans and other voluntary methods of medical practice in contrast to the compulsory regimentation programs outlined in other proposals before Congress, particularly the Wagner-Murray-Dingell Bill.

SIGNALS! 140-712-1310!

These are not football signals. They are the numbers of bills in the United States Senate—bills that vitally affect each and every doctor of medicine in the practice of his profession.

S.B. 140 is opposed by the Michigan State Medical Society because it would place a nonmedical intermediary between the health division of the proposed department (Health, Education, and Security) and the President of the United States.

S. 712, the Aiken Bill, would reconstitute the Federal Security Agency as a department of cabinet stature. This bill seems to be inspired by the same social welfare group which advocated the Wagner-Murray-Dingell Bills of past years.

S. 1310 is the new 1947 Wagner-Murray-Dingell Bill. The latest co-sponsors include Senators

(Continued on Page 744)

Continue until weaning...

No substitute for mother's milk is more highly regarded than Similac for feeding the new born, twins, prematures, or infants that have suffered a digestive upset. Similac gives uniformly good results in these special cases simply *because it resembles breast milk so closely*. Normal babies thrive on it *for the same reason*.

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SIMILAC

Similar to breast milk

SIGNALS!

(Continued from Page 742)

Pepper, Chavez, Taylor and McGrath. S. 1310 has added a sugar-coating to its lethal lining by inserting some alleged "grass roots" controls. Its introduction in late May was augmented by another message to Congress from Mr. Truman who urged "a national health insurance program for all persons: (1) to pay their necessary hospital and doctor bills (and dentist bills too); (2) to reimburse them, at least in part, for earnings lost by "illness or disability not connected with their work."

The *Detroit Free Press* of May 20 ends its story on Mr. Truman's message with the pertinent observation: "The message left to Congress the details as to just who would pay the premiums!"

MEDICAL PUBLIC RELATIONS
VIA THE RADIO

A big public relations job is being done by the Michigan State Medical Society in the field of radio. The state-wide schedule of radio presentations sponsored by your State Medical Society, in co-operation with local radio stations, agencies and firms, as of June 1, 1947, included three programs, as shown below.

"A LOT OF" MEDICAL CHARITY

Says Florida's Senator Claude Pepper at the hearings on S. 545: "I think a lot of this charity service that is talked about is a lot of hokey, and I think a lot of poor people can prove it."

Senator Pepper doesn't have "a lot of" charity in his heart for the medical profession.

The charity a physician does becomes part of his confidential relationship with his patients. Were it publicized, it would lose its character as charity and become merely the overt publicity activity of a gratitude-seeking benefactor.

A conservative estimate of the number of hours given each year by doctors of medicine to hospitals, clinics, etc., etc., is \$1,000,000 per day (not per year, not per month, not per week—but *per day!*).

The most righteous of the left-wingers in Congress, including Senator Pepper, cannot deny that \$365,000,000 per annum is a large contribution to charity—greater than is being given by any foundation or individual the world over. However, left-wingers will discredit even \$365,000,000 worth of charity in their frenzied efforts to foist socialized schemes, quietly and surreptitiously, on a seemingly disinterested U. S. public. They bitterly resent the introduction of *truth*, presented by the medical profession and others, into hearings before congressional committees.

(Turn to Page 746)

CITY	STATION	TIME	M	T	W	T	F	S	
1. "TELL ME, DOCTOR" (Five minutes)									♂
Grand Rapids	WLAV	6:15 p.m.	x	x	x	x	x	x	x
Battle Creek	WELL	6:10 p.m.—Sun. 8:25 p.m.	x	x	x	x	x		
Port Huron	WHLS	1:35 p.m.	x	x	x	x	x	x	
Lansing	WJIM	10:15 a.m.	x	x	x	x	x	x	
Detroit	CKLW	9:45 a.m.	x	x	x	x	x		
Kalamazoo	WKZO	8:40 a.m.		x		x			
Cadillac	WATT	8:20 p.m.	x	x	x	x	x		
Iron Mountain	WMIQ	4:55 p.m.	x	x	x	x	x		
Ludington	WKLA	9:55 a.m.	x	x	x	x	x		
Marquette	WDMJ	11:30 a.m.	x	x	x	x	x		
Jackson	WIBM	12:15 p.m.						x	
Alpena	WATZ	4:30 p.m.	x	x	x	x	x		
Calumet	WHDF	9:30 a.m.	x	x	x	x	x	x	
Lapeer	WMPC	10:15 p.m.	x	x	x		x		
2. "DOCTOR OF MEDICINE" (Ten minutes)									
Detroit	CKLW	2:30 p.m.					x		
3. "MEDICAL TALKS" (Fifteen minutes) (Michigan State Medical Society and University of Michigan joint project)									
Detroit	WJR	10:15 p.m.						x	
East Lansing	WKAR	2:30 p.m.	x						
Iron Mountain	WMIQ	7:15 p.m.		x					



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JULY, 1947

Say you saw it in the Journal of the Michigan State Medical Society

745

(Continued from Page 744)

P R SUPPLEMENT

Supplement No. 1 to the MSMS Public Relations Plan covering the "Newspaper Advertising and Publicity Program" has been mailed to all members of the Society. You are invited to keep this Supplement, together with the Public Relations Plan issued last year, for easy reference.

A COMPARISON OF HOSPITAL COSTS, 1940-1947

Because of unwarranted criticism of present hospital rates, the cost of hospital materials, drugs and labor is presented below. The year 1940 is used because on the following years prices began to rise, have risen ever since and are still rising. The figures are those of The Grace Hospital (Main) but they might just as well be those of any other hospital—prices and costs are very similar throughout the Detroit area.

DESCRIPTION	1940	1947	REMARKS
Bed Sheets (63x108), Per Doz.....	\$ 6.72	\$ 25.98	Practically unobtainable.
Surgeons' Gowns, Per Doz.....	9.90	24.63	Practically unobtainable.
Gauze—36 In. x 100 Yd. Bolt.....	2.80	4.70	Critical item.
Cat Gut—Per Doz.	2.30	3.14	Critical item (glass shortage).
Butter—Per Pound30	.75	Critical item.
Canned Cherries—Per Doz. No. 10 Can.....	10.50	21.00	Practically unobtainable.
Pork Loin—Per Pound.....	.17	.55	Unobtainable at times.
General Duty Nurses (48-Hour Week).....	102.50		40-Hour Week necessitates an increase of 16% in number of nurses.
General Duty Nurses (40-Hour Week).....		200.00	
Cost Per Patient Day.....	5.41	14.62	Cost has tripled.
ROOM RATES			
Wards	4.00	8.50	Rates have doubled.
Semi-private Rooms	5.00	10.00	Rates have doubled.
Private Rooms	10.00	17.00	Rates have doubled.

It should be noted that costs have increased two and one-half to three times while rates have increased approximately two times only. Hospitals try to bring back health to patients, to give good service, to aid and supplement the physician in his work and to break even.

The above statistics are presented that you as a physician may give to your patients an accurate picture of the why of hospital rates and where their hospital dollar goes.—*Detroit Medical News*, April 21, 1947.

THE PROBLEM IS OURS

The increase in rates announced by the hospitals of the metropolitan district has precipitated some discussion as to the effect it may have in swaying the opinion of an already socialized medicine-minded public toward a demand for some form of government medicine.

The need for the increase in rates is evident from a study of the figures of 1940 and 1947 published on the opposite page. It is obvious that hospitalization costs are soaring beyond the reach of the uninsured patient of moderate means and that prolonged hospitalization may be prohibitive even though he has insurance. Thus there may come to pass a redefinition of the charity

patient who, in the jargon of the sociologist, has already been prechristened a "ward of the government."

The solution of this problem is ours—we will accomplish nothing constructive by damning the hospital management. Expenses are met from the money collected from patients. There are no longer any private donors of funds.

It isn't fair to compare hospital costs to hotel costs. Good hotels employ one worker for each 2.5 to 3.0 guests, while good hospitals employ two workers for each (one) patient. Furthermore, hospitals as yet have not taken to owning and profiting from cocktail lounges. Neither is it logical thinking when criticism is directed at the cost of training interns, nurses and residents. The modern hospital is a public service institution dedicated to the protection of the health of the community it serves. It is the repository, through its staff, of the medical knowledge, and through its physical equipment, of the best of the diagnostic and therapeutic aids. It must prepare the young physician for practice and provide a source of knowledge for the practicing physi-

cian. A hospital that functions only as a workshop for the physician is not serving the common good.

Relief from high costs must come from monies donated either by private individuals or by the government to supplement the income of the hospitals. Our present income and gift tax setup makes it prohibitive for private citizens to give amounts sufficiently large to affect the cost picture, hence it appears aid will have to come from tax monies either through grants directly to hospitals or by the building of government owned and managed institutions.

A more efficient method would be to free donations, to accredited hospitals, of the gift tax and permit their deduction from the income tax. Thus the full amount would go to the hospital (and hence to the public) without the erosion that occurs when monies flow through government channels.—FRANK A. WEISER, M.D., Editorial, *Detroit Medical News*, April 21, 1947.

EDITOR'S NOTE: This editorial and the comparison of costs is so eminently timely and fair that we are glad to reproduce it for the benefit of all our members throughout the State.

(Continued on Page 748)



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BENADRYL® hydrochloride

The results of a recent survey of the clinical use of
Benadryl (diphenhydramine hydrochloride) in 2665
patients are shown in the accompanying table.

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Clinical Entity	Patients	Satisfactory	Questionable	No Benefit	% Showing Improvement
THERAPEUTIC RESULTS WITH BENADRYL IN 2665 PATIENTS					
URTICARIA	766	692	16	58	90.3
VASOMOTOR RHINITIS	349	268	2	79	76.7
ECZEMA	128	79	7	42	61.7
HAY FEVER	425	350	36	39	82.4
ASTHMA	435	275	7	153	63.2
MIGRAINE	73	48	1	24	65.7
ANGIONEUROTIC EDEMA	54	46	1	7	85.2
ATOPIC DERMATITIS	66	42	1	23	63.6
PRURITUS	24	18		6	75.0
ERYTHEMA MULTIFORME	28	22		6	78.6
DERMOGRAPHIA	20	15		5	75.0
FOOD ALLERGY	37	32		5	86.5
CONTACT DERMATITIS	63	49		14	77.7
PHYSICAL ALLERGY	11	7		4	63.6
REACTIONS—ANTIBIOTIC	84	81	1	2	96.4
REACTIONS—DRUGS	46	42		4	91.3
REACTIONS—BIOLOGICS	12	12			100.0
DYSMENORRHEA*	44	38		6	86.3
TOTALS	2665	2116	72	478	79.39

*those cases due to histamine-induced spasm of smooth muscle.

Benadryl
hydrochloride



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(Continued from Page 746)

PUBLIC TOO SINUS-MINDED

The public is "overly sinus-conscious," Dr. Albert C. Furstenberg, University of Michigan Medical School dean, told the 15th annual Adult Education Institute.

"Only one person in fifty who diagnoses his own case as sinus trouble really has the condition," he declared.

Dr. Furstenberg pointed out that few cases of heart trouble, arthritis or other systematic diseases are traceable to a sinus.

He warned against use of home preparations.—*Detroit Free Press*, May 15, 1947.

MICHIGAN MEDICAL SERVICE BENEFITS

Beginning May 1, 1947, Michigan Medical Service has been paying \$100.00 for appendectomies. This is the last major surgery rate to be equalized with prevailing rates in practice. Several rates have recently been raised, but this is the most outstanding. Obstetrics for direct pay members has been re-established, as noted recently. It was re-established before the expiration date in the notice of suspension, so members are losing nothing, there being no lap.

Under contract with the Veterans Administration, Michigan Medical Service through the doctors of Michigan has been giving authorized medical service to veterans. When the service has been rendered, and reported to MMS the Veterans Administration is billed for the service, plus a small administrative fee. Remittances were promised promptly, but as of May 1, the amount receivable for Michigan Medical Service was \$341,000.00, and for Michigan Hospital Service, \$170,000.00. The government owes the Michigan Blue Cross plans over half a million dollars for services to veterans authorized and paid for by the plans, and the government gets the use of this money without interest. This has been the experience since the plan was first put into effect.

BOND-A-MONTH PLAN

The doctor of medicine is supposed to be a good scientist, diagnostician, a good doctor for the ills of the people but a very bad doctor for the financial future. We have received two communications from the Treasury Department, submitting a long article for publication in *THE JOURNAL*, telling of the need of the doctor for some systematic saving system, which will relieve him of the necessity of following financial and other reports and watching the market so as to make an occasional thousand dollars in order that some day in the future he may send Johnnie to college.

We are relieving our readers of four pages of material and condensing the plan. Until now, systematic savings bonds were available only through payroll deductions, but now—

"The depositor who wishes to buy a bond each month signs a card authorizing the bank to deduct the purchase price from his checking account. The bank issues the bonds and delivers them to the customer monthly. The periodic bank statement shows payment for the bonds.

"And from the first and the only time the doctor signs his authorization card, he has nothing else to do except open the envelopes the bank sends him with the bonds inside.

"Incomes of physicians are much more responsive to fluctuations in national income than other professions. The doctor has no social security or pension to fall back upon. He needs simplicity of program, not continued checking, manipulating, buying, selling. There is no safer investment in the world than Savings Bonds."

If you invest monthly under the Bond-a-Month Plan	In five years you will have	In ten years you will have
\$ 37.50	\$ 2,319.00	\$ 4,998.00
75.00	4,638.00	9,996.00
150.00	9,276.00	19,992.00
300.00	18,552.00	39,984.00

CONFERENCE, GRADUATE AND POSTGRADUATE MEDICAL EDUCATION

The University of Michigan Medical School, sponsored by the W. K. Kellogg Foundation of Battle Creek, conducted a conference on Graduate and Postgraduate Medical Education at the Rackham Building, Ann Arbor, May 19, 20 and 21, 1947. The program consisted of six conferences:

1. Review of Graduate and Postgraduate Activities. Moderator, Harold S. Diehl, Minnesota. Discussants, C. E. de la Chapelle, NY University, Wilburt C. Davison, Duke, William A. O'Brien, Minnesota, John B. Truslow, Columbia and R. Hugh Wood, Emory.

2. Graduate Training and Continued Education of the General Practitioner. Moderator, A. C. Furstenberg, Michigan. Discussants, Walter A. Bloedorn, George Washington, Ward Darley, Colorado, E. M. MacEwen, Iowa, William A. O'Brien, Minnesota.

3. Review of Graduate and Postgraduate Activities. Moderator, Joseph C. Hinsey, Cornell. Discussants, C. F. Wilkinson, Michigan, Murray C. Brown, Meharry, Robert A. Moore, Washington, Thomas M. Perry, George Washington, John E. Deitrick, Cornell, Charles N. Holman, Oregon.

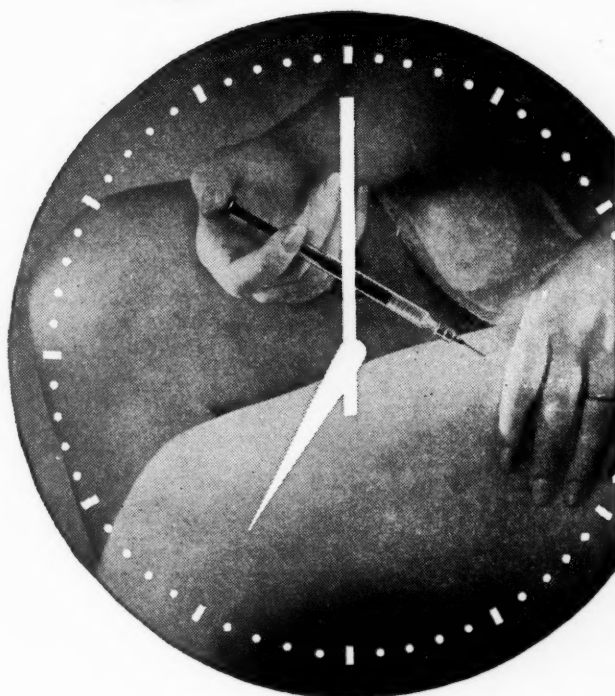
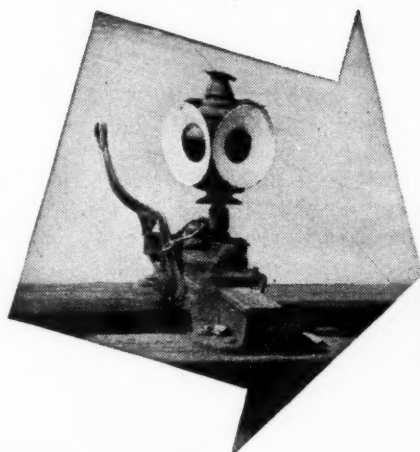
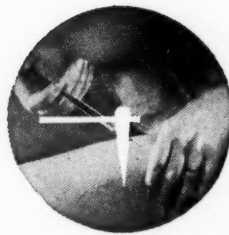
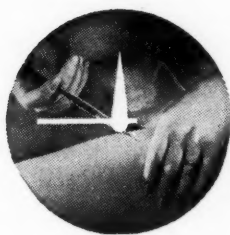
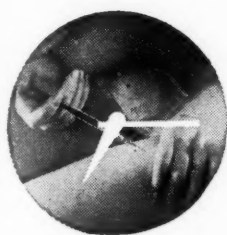
4. The Teaching of the Basic Sciences. Moderator, Curruer McEwen, New York. Discussants, Thomas M. Perry, George Washington, Ford K. Hick, Illinois, John E. Deitrick, Cornell, C. E. de la Chapelle, New York.

5. Review of Graduate and Postgraduate Activities. Moderator, Howard H. Cummings, Michigan. Discussants, Ford K. Hick, Illinois, Robert P. McCombs, Tufts, John T. McClintock, Iowa, James P. Baker, Virginia, Ward Darley, Colorado.

6. The Regionalization of Medical Education. Moderator, Samuel Proger, Tufts. Discussants, Lester J. Evans, Commonwealth Fund, W. T. Sanger, Virginia, Charles F. Wilkinson, Jr., Michigan. Each of these conferences was followed by extensive discussion.

On May 20, the evening dinner was addressed by Vice President Adams of the University, and by Salvador Zubiran, Rector of The National University of Mexico who spoke on "Graduate Education at the National University of Mexico." He told of the building of a new university in a new city, and gave pictures. Ralph A. Sawyer, Dean of the Graduate School, University of Michigan, who headed the scientific work of the atom

(Continued on Page 750)



a switch in time

A SWITCH to 'Wellcome' Globin Insulin with Zinc can often save the annoyance of a second or third daily insulin injection—for in many cases the patient's needs can be supplied with *only one injection a day* of this unique intermediate-acting insulin. Three distinct steps provide the welcomed change-over:

1. THE INITIAL CHANGE-OVER DOSAGE: The first day, 30 minutes or more before breakfast, give a single dose of Globin Insulin, equal to $\frac{1}{2}$ the total previous daily dose of protamine zinc insulin or of protamine zinc insulin combined with regular insulin. The next day, dose may be increased to $\frac{2}{3}$ former total.

2. ADJUSTMENT TO 24-HOUR CONTROL: Gradually adjust the Globin Insulin dosage to provide 24-hour control as evidenced by a fasting blood sugar level of less than 150 mgm. or sugar-free urine in the fasting sample.

3. ADJUSTMENT OF DIET: Simultaneously adjust carbohydrate distribution of diet to balance insulin activity; initially 2/10, 4/10 and 4/10. Any midafternoon hypoglycemia may usually be offset by 10 to 20 grams carbohydrate at 3 to 4 p.m. Base final carbohydrate adjustment on fractional urinalyses.

Most mild and many moderately severe cases may be controlled by *one daily injection of 'Wellcome' Globin Insulin with Zinc*. Vials of 10 cc.; 40 and 80 units per cc. Developed in The Wellcome Research Laboratories, Tuckahoe, New York. U.S. Pat. 2,161,198. Literature on request.

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CONFERENCE GRADUATE AND POSTGRADUATE MEDICAL EDUCATION

(Continued from Page 748)

research and study, gave a most interesting talk on the work of the Navy in which he served. He presented moving pictures of the "Operation Crossroads," showing the enormous preparations and carrying out of the two atom blasts at Bikini, one in the air and one under water.

Participants in Conference

- SALVADOR ZUBIRAN, *Rector*, The National University of Mexico, *Director*, Hospital for Nutritional Diseases
 JAMES P. BAKER, *Director of Continuation Education*, Medical College of Virginia
 WALTER A. BLOEDORN, *Dean*, School of Medicine, The George Washington University
 MERL CARSON, *Assistant Dean in Charge of Postgraduate Affairs*, Washington University School of Medicine
 M. DON CLAWSON, *President*, Meharry Medical College
 HOWARD H. CUMMINGS, *Chairman*, Postgraduate Medical Education, University of Michigan Medical School
 WARD DARLEY, *Dean*, University of Colorado School of Medicine
 WILBURT C. DAVISON, *Dean*, Duke University School of Medicine
 JOHN E. DEITRICK, *Director of Postgraduate Instruction*, Cornell University Medical College
 C. E. DE LA CHAPELLE, *Associate Dean; Director*, Postgraduate Division, College of Medicine, New York University
 HAROLD S. DIEHL, *Dean of The Medical Sciences*, The Medical School, University of Minnesota
 LESTER J. EVANS, *The Commonwealth Fund*
 A. C. FURSTENBERG, *Dean*, University of Michigan Medical School
 HANCE F. HANEY, *Head of Department of Physiology*, University of Oregon Medical School
 FORD K. HICK, *Assistant Dean in Charge of Postgraduate Instruction*, University of Illinois College of Medicine
 JOSEPH C. HINSEY, *Dean*, Cornell University Medical College
 CHARLES N. HOLMAN, *Medical Director*, University of Oregon Medical School
 FRODE JENSEN, *Director of Graduate and Postgraduate Training*, University of Colorado School of Medicine
 E. M. MACÉWEN, *Dean*, College of Medicine, The State University of Iowa
 JOHN T. MCCLINTOCK, *Director of Postgraduate Education*, College of Medicine, The State University of Iowa
 ROBERT P. MCCOMBS, *Director*, Postgraduate Teaching, Tufts College Medical School
 CURRIER McEWEN, *Dean*, College of Medicine, New York University
 ROBERT A. MOORE, *Dean*, Washington University School of Medicine
 WILLIAM A. O'BRIEN, *Director*, Postgraduate Medical Education, The Medical School, University of Minnesota
 THOMAS M. PEERY, *Director*, Postgraduate Instruction, School of Medicine, The George Washington University
 SAMUEL PROGER, *Professor of Clinical Medicine*, Tufts College Medical School and Medical Director, Pratt Diagnostic Hospital
 W. T. SANGER, *President*, Medical College of Virginia
 TRAWICK H. STUBBS, *Associate Dean*, Emory University School of Medicine
 GRANT TAYLOR, *Assistant Dean*, Duke University School of Medicine
 JOHN B. TRUSLOW, *Assistant Dean*, College of Physicians and Surgeons, Columbia University

CHARLES F. WILKINSON, JR., *Co-ordinator*, Graduate Medical Education, University of Michigan Medical School

R. HUGH WOOD, *Dean*, Emory University School of Medicine

GRAHAM DAVIS, *President Elect*, American Hospital Association, and Kellogg Foundation, Battle Creek.

William A. Hyland, president of the Michigan State Medical Society, and the Editor also attended, as well as about a dozen others not registered.

MICHIGAN UNIFORM FEE SCHEDULE FOR GOVERNMENTAL AGENCIES

A letter from the Department of Social Welfare extends the application of the Uniform Fee Schedule to still another agency. Ophthalmologists have been treating clients of the Aid to the Blind and Division of Services for the Blind in the State Department of Social Welfare. Until October, 1944, this consisted simply of examinations to determine eligibility to receive service. Since that time services have been extended to include medical diagnosis, medical and surgical treatment, guidance, and counseling, training and job placement for those who desired to become employable.

Eye examinations are authorized routinely for every "blind" client who comes to the department for service. The purposes of these examinations are as follows:

1. To determine degree of visual defect.
2. To determine possibility of improving vision by means of medical or surgical care, or correcting lenses.
3. To provide basic information to assist the department in helping the client to decide on a vocational objective.
4. To establish a basis for relief statistics of blindness.

The Department may pay a rate which is no higher than the doctor's fee to any other public agency for the same service. It may, further, be no higher than his private patient rate. The doctor may use the Michigan Uniform Fee Schedule for Governmental Agencies as a guide, up to a ceiling of \$75.00.

This information is quoted from a letter sent to ophthalmologists on the department list.

ANOTHER PEARL HARBOR?

The Territory of Hawaii presented a serious threat for the introduction of socialized medicine, for three months, ending only with the adjournment of the Legislature on May 3. Had this legislation been enacted, it would have introduced in the United States a precedent with far-reaching implications and results—especially since Hawaii is moving toward statehood.

Based on a "Hospital Services Study Commission" report, two compulsory sickness insurance bills were introduced into the Legislature. In order to defeat the two proposals, the Territorial Medical Association engaged in a very intensive public relations program. The compulsory sickness tax bill failed to get out of committee, despite the efforts of various social workers and other proponents, including Nathan Sinai, Dr. P.H. of Ann Arbor, Michigan.

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333 Years of Medical Partnerships

By Henry C. Black and Allison E. Skaggs

Battle Creek, Michigan

"THE ADVANTAGES of a partnership are much more apparent than its disadvantages, and fortunately most of the disadvantages may be eliminated by a thorough understanding of them and proper arrangements made at the start." This quotation from an article we wrote for this JOURNAL⁵ ten years ago is as true now as it was then. Several years later we wrote briefly, discussing "Assistants—Associates—Partners,"² outlining distinguishing characteristics of each type of association. Since that time frequent inquiries have indicated the interest being shown in medical partnerships and one need for more factual information. As a basis for this analysis, we have selected from our list of clients fifty small Michigan partnerships limited to two or three physicians.

Small groups such as this seem to be more common in Michigan than large ones although there are a number of groups which jointly own a building but practice separately. Several physicians may rent space individually from a common landlord, perhaps himself a physician, and the group may call itself the Dr. Blank Medical Group or the Blank Clinic, but few of these associations actually pool income and investment on a partnership basis. In the states surrounding Michigan, however, many large groups have been operating as partnerships for years. Why MSMS members have seen fit to prefer small partnerships is a matter for conjecture; certainly we would not venture an explanation. In any event, our experience with these larger groups has little bearing on our analysis of the smaller ones, and the problems of group practice do not properly come within the scope of this discussion.

Here are a few statistics about the fifty partnerships used in making our observations, most of which we insisted in organizing, all of which were clients of ours the first of this year, and had been regular clients for a variable period, averaging over three years. Thus our information is based on actual experience and not on an accumulation of figures from less accurate sources. The average age of these partnerships was 3.7 years; sixteen were in existence for from five to sixteen years, twenty-five from one to five years, and nine were started during 1946. Distribu-

tion as to locality was quite representative—several in Detroit, many in other cities and some in small communities.

Eighteen of the partnerships did general practice, while the other thirty-two limited their practices to one or more specialties. Strangely enough, however, only two practiced two different specialties within the same partnership (Medicine and Surgery), and in the thirty others the partners limited themselves to one specialty.

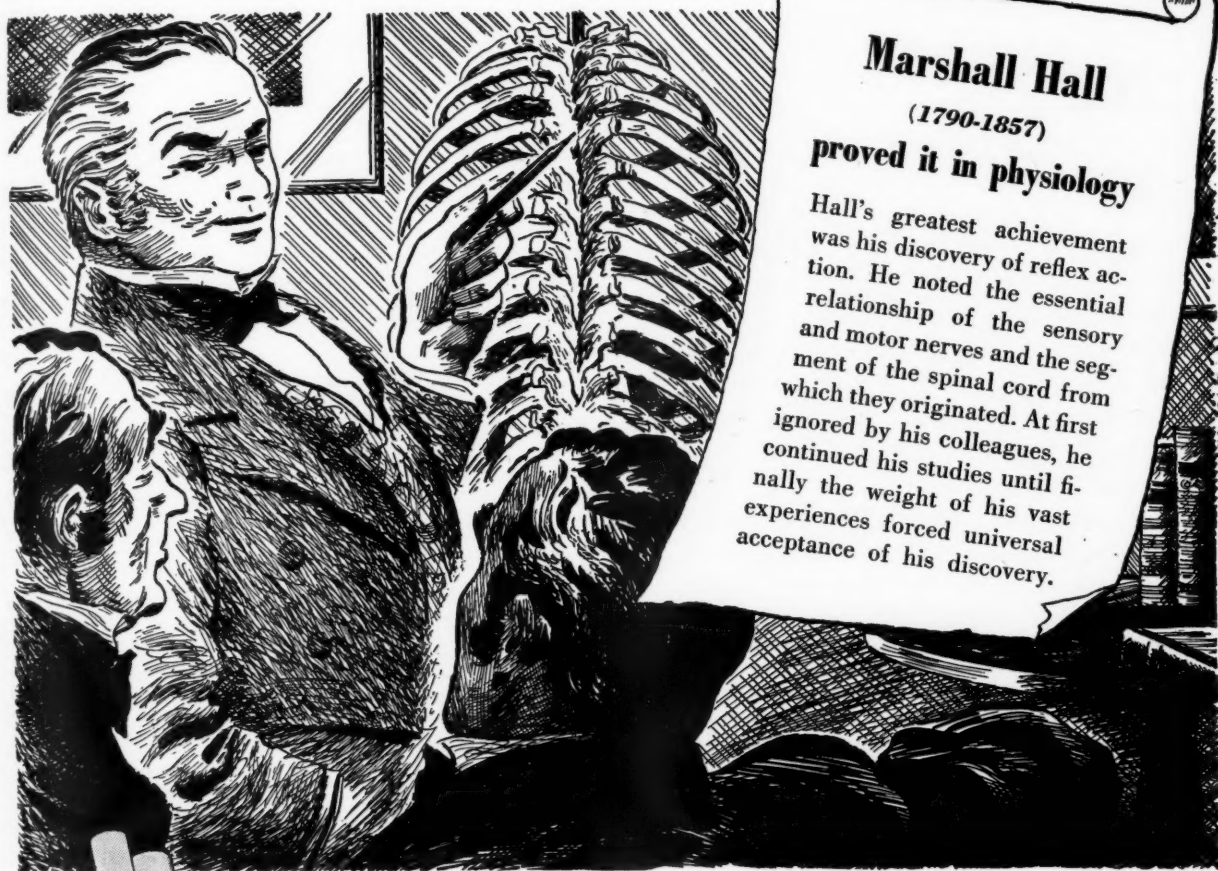
As to investment, further analysis shows that thirty-one shared ownership of the partnership assets equally, regardless of the method used to distribute profit. Only twenty-two divided profits equally, but nineteen others were working toward equal division, with the percentages changing from year to year. Nine partnerships based the division of profits in whole or in part on the volume of income each partner produced.

Before going into the specific recommendations which we feel are possible, it becomes necessary to explode two theories commonly entertained by physicians and their advisors; first, that the overhead in a partnership is less; and second, that the sharing of equipment, furniture, et cetera, results in a smaller investment per man. *We find neither of these assumptions to be true.* In a comparison of costs of practice for the years 1939,^{1,3} 1944,⁴ and more recently 1946, it was found that the incomes, expenses, and investment per man varied in each of these years only because of changing economic conditions, and no differences of as much as 1 per cent could be found between the averages of individuals practicing alone and averages taken from partnerships divided by the number of partners represented.

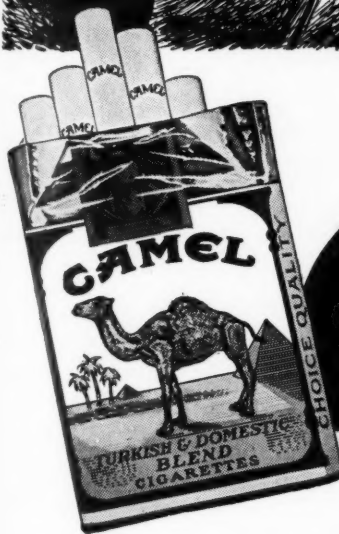
We have pointed out repeatedly the importance of using adequate legal counsel in the preparation of sound partnership agreements and the extreme importance of good financial records.^{6,7} The legal instrument should include, among other things, duration, ownership, distribution of profits, definition of expenses, and dissolution in the event of death or disagreement. In the case of Junior-Senior relationships, it is well to include any rights the Senior might retain as to control of policy. Beyond this, any specific detail which the partners

(Continued on Page 754)

Experience is the Best Teacher



Yes, experience is the best teacher in smoking too!



IT WAS their experience during the wartime shortage of cigarettes which taught people the big differences in cigarette quality. People smoked many different brands then—whatever brand was available. And so many more smokers came to prefer Camels as a result of that experience that now more people are smoking Camels than ever before. However, no matter how great the demand, we don't tamper with Camel quality. Only choice tobaccos, properly aged, and blended in the time-honored Camel way, are used in Camels.

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JULY, 1947

Say you saw it in the Journal of the Michigan State Medical Society

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(Continued from Page 752)

care to include is permissible and often advisable, but in general simplicity is to be preferred to ambiguity, and a partnership is successful NOT because every possible detail is covered under the terms of a contract, but rather because the partners are compatible, have mutual confidence in each other, and use reasonable judgment in their business decisions.

The books of financial record should be set up by an accountant competent in the technical details of partnership accounting and familiar with the problems peculiar to medical practice. As we pointed out years ago, good financial records are most important in any practice, and a necessity where the income and investment of several partners are involved. Likewise the termination of a partnership upon the death of a partner, or because of the inability of the partners to get along, requires financial records sufficient to permit an orderly liquidation by a third party who may have only records on which to rely.

A sound financial position is always desirable in a partnership because "our" money and not "my" money is involved, and there have been too many cases in which depreciation reserves were divided as income, with a resulting lack of funds for replacement. This common error prompts us to urge that all partnerships use occasional accounting counsel to see that their records reflect the conditions they believe to be true.

Obviously some partnerships should not begin distributing profits on an equal basis. For instance, when a physician with an established practice takes in a younger man, or when there is a substantial difference in age, training or experience, it is necessary to use a graduated percentage working toward but not necessarily arriving at an equal distribution in future years. Generally speaking, if the investment is equal even from the beginning of the partnership, it simplifies the book-keeping and tends to stabilize the younger man. If the junior partner does not have enough money to "buy in," the senior partner can take his note, but actually paying for it as it becomes possible gives the junior partner a far better evaluation of the cost of his interest in the partnership.

When a partnership is formed among physicians, any of whom have uncollected accounts on their books, the question often arises as to whether they should be included in the partnership income as they are paid (perhaps adjusting percentages to compensate), or whether they should be col-

lected by the individual doctor. In either case, good accounting is essential, and it may be done either way satisfactorily. Although too involved to discuss in detail here, sometimes there are tax advantages to a partnership through beginning and closing its books on other than a calendar year basis, in which case no previously earned receivables should be included with partnership receipts, unless the individual doctor gets and reports that income separately. Several other items require special treatment, such as the drugs and supplies already charged off as expenses by the individual, and used by the partnership after its formation.

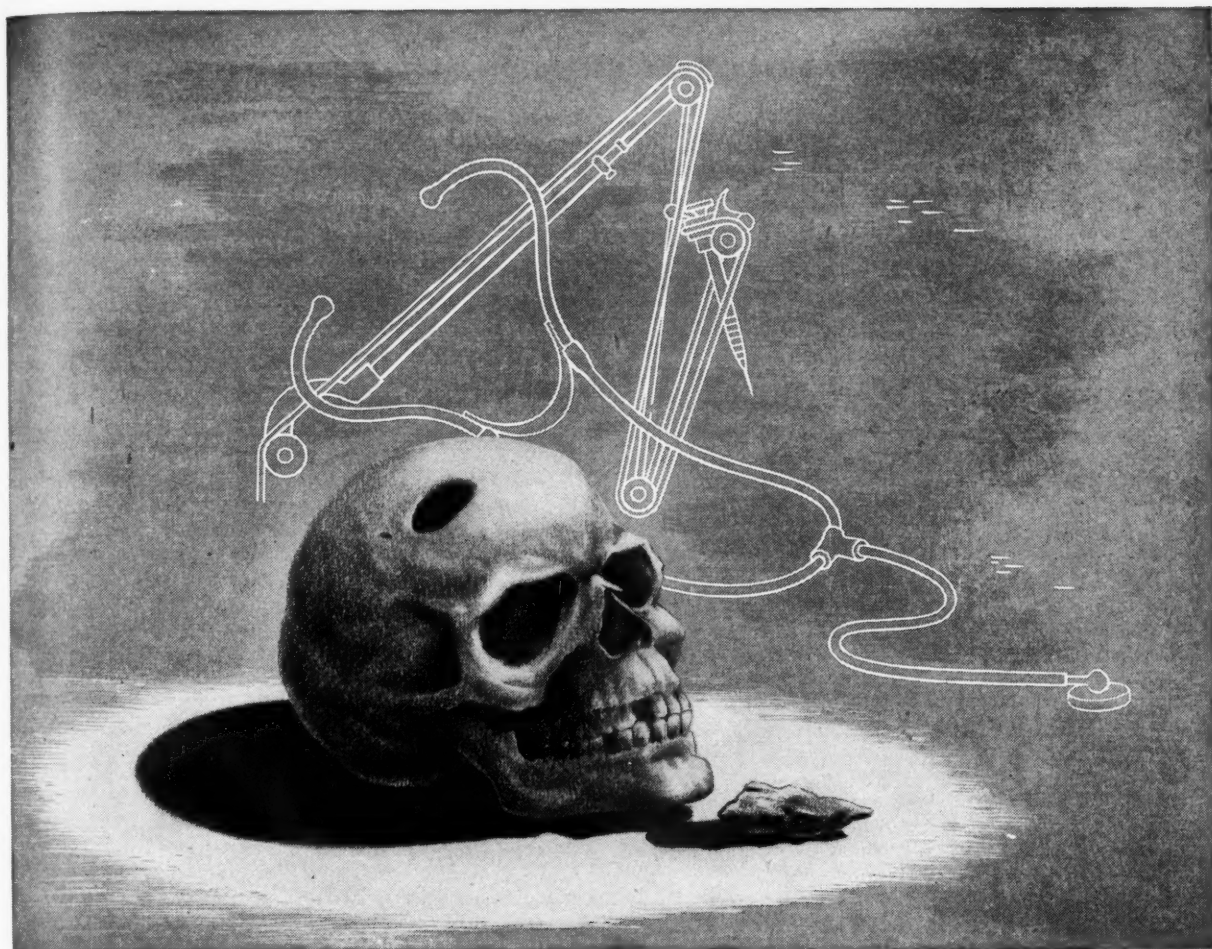
Anyone who contemplates association with a partnership should know the other partners well, both professionally and socially, be familiar with their abilities, habits and ambitions, so that compatibility and mutual interests are reasonably assured. If a young man is being considered as a candidate for a partnership, it is far better for him, as well as for the others involved, to consider his temporary employment long enough for all to qualify each other as a partner before an actual contract is drawn. The termination resulting from failure to get along under this arrangement is very simple as compared with the dissolution of a partnership, which at best is involved and sometimes even requires litigation.

Conclusion

Our experience during the past fifteen years has shown us enough advantages in partnership practice to outweigh the disadvantages, provided proper precautions are taken before and during the lifetime of the partnership. The leisure not readily available otherwise; the counsel a partner can obtain from his associates; the frequent availability of better clinical facilities; the continuity of service to patients during absences; and, last but not least, the improved financial security—all of these are possible. The degree of their attainment is in proportion to the ethics, confidence and enthusiasm contributed by each partner.

Bibliography

1. Black, Henry C., and Skaggs, Allison E.: A study of incomes and expenses for 1939. *J. Michigan M. Soc.*, (Sept.) 1940.
2. Black, Henry C., and Skaggs, Allison E.: Assistants-associates-partners. *J. Michigan M. Soc.*, (July) 1940.
3. Black, Henry C., and Skaggs, Allison E.: Budgets. *J. Michigan M. Soc.*, (June) 1938.
4. Black, Henry C., and Skaggs, Allison E.: Medical incomes in wartime. *J. Michigan M. Soc.*, (July) 1945.
5. Black, Henry C., and Skaggs, Allison E.: Partnerships. *J. Michigan M. Soc.*, (Dec.) 1937.
6. Black, Henry C., and Skaggs, Allison E.: The investment program. *J. Michigan M. Soc.*, (July) 1937.
7. Black, Henry C., and Skaggs, Allison E.: What you owe and what you own. *J. Michigan M. Soc.*, (Mar.) 1937.



The First Operation....

The First Surgical Operation was performed with a sharp stone and firebrand in Neolithic Egypt. A skull was pierced to let out evil spirits. The patient survived. Modern trephining was on the way.

The First Dental Operation, in the era of the Pharaohs, was extraction by an instrument shaped like a goat's foot. Replacements were of wood, ivory, metal

buttons and ox teeth. Modern dentures were on the way. But the modern concept of the doctor's *responsibility*, as set forth in malpractice law, was *not* yet on the way.

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JULY, 1947

Say you saw it in the Journal of the Michigan State Medical Society

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National Health Bill

Statement by E. F. Sladek, M.D., Traverse City, Michigan
Chairman of the Council, Michigan State Medical Society
Secretary, National Conference on Medical Service

I feel that the ideology on which S-545 is based is sound; that it is a good bill. Should this bill become law, the health of our people can be materially benefited.

The efficacy of any national medical care program can be judged only by its value at the local level.

I speak from the local level, as I have spent twenty-seven years in the practice of medicine in Traverse City, Michigan, which has a population of 15,000 and serves a rural area having an additional 10,000 population. This region is typical of those areas in the United States which are removed from the immediate influence of great urban centers.

Advantages of the National Health Bill of 1947

1. *It Continues and Encourages Voluntary Prepaid Medical Care Plans*

In areas such as my 25,000 population county, the operation of a voluntary pre-payment medical care plan has, over the past few years, resulted in the correction of many long-standing disabling defects among the people and has made a major contribution to the health of the entire population. S-545 favors a continued development and encouragement of such voluntary pre-paid medical care plans. This is a highly desirable feature of any national health plan, as it permits people having a relatively small income to budget their funds to defray the cost of unforeseeable illnesses, accidents and surgical repair.

2. *Care is Adequate Under Voluntary Prepaid Medical Care Plans*

The care given under voluntary pre-paid medical care plans is adequate to meet the needs of the people. In my locality, it has been demonstrated repeatedly that those who carry such protection need not and do not worry about receiving care for any illness which would seriously impair the health of the person or his ability to make a living. I must qualify this by saying that this does not

provide for care in extended illnesses such as tuberculosis or infantile paralysis and such disabling disease. However, those afflicted with such diseases are being cared for under state and national programs of both a governmental and non-governmental variety. I refer to such programs as the Vocational Rehabilitation Service, the Tuberculosis Commissions and Associations, the National Infantile Paralysis Association and so forth. Under S-545 all medical services by governmental agencies will be under one directive head and consequently, because of a more uniform type of service, these patients can be more efficiently covered and served.

This protection provides care for the great majority of cases which physicians on the average meet in their daily practice, and thus the great majority of illnesses confronting the people. These contracts do not provide for preventive medicine. To do so would be unnecessary duplication for preventive medicine from the state level is being taken care of most adequately by the state departments of health, medical societies, various educational organizations and departments. On the local level, preventive medicine is not sufficiently expensive to be of great concern since it consists mainly of inexpensive regular physical checkups and a knowledge of healthful living. I repeat when the voluntary medical care program can be placed within the reach of all who desire it, the health of the people insofar as medical care is concerned will be adequate.

3. *Desirable to the Patient*

From the standpoint of the patient, the care given under voluntary pre-paid medical care plans is the most desirable of any variety. Under these plans the patient-physician relationship is maintained; the facilities of the best institutions are available; the stigma, if such exists, of charity is not present; red tape is cut to an absolute minimum; the care of the patient is given by physicians of the patient's choice; delay in the administering of medical care in emergency cases is unnecessary.

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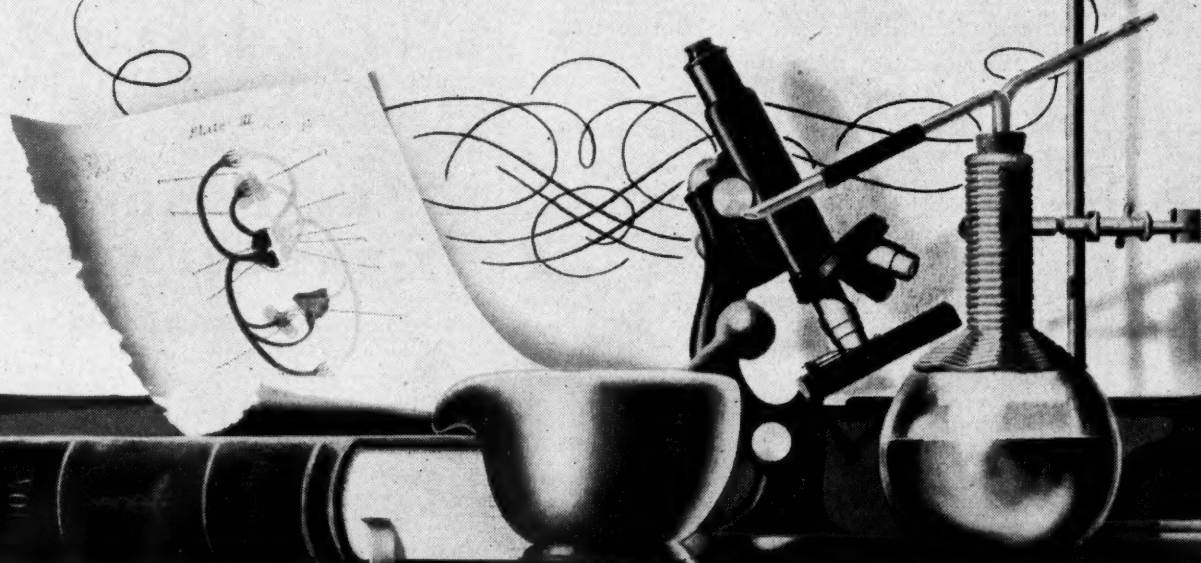
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(Continued from Page 756)

4. Satisfactory to the Doctor

Voluntary pre-paid medical care plans are satisfactory from the standpoint of the doctor. It provides him with adequate recompense for his services so that he can locate in any area in which there is adequate demand for a doctor and thus provides a means for the proper and adequate distribution of medical care to all areas. He feels confident in the administration of such plans for representatives of his own profession, elected by him, serve in administrative and in advisory capacities on the governing boards. By daily experience, he is familiar with the procedures, forms and implementations. He feels he is carrying on the traditions developed under the private practice of medicine which have proved to be most capable of advancing the standards of his profession.

A classic example of how the voluntary pre-paid medical care plan can be adopted to care for the medically indigent is supplied by the "home town" plan for the care of veterans now being carried on in Michigan under Michigan Medical Service. The type of co-operation which may be expected from doctors under such a plan is evidenced by the fact that while no veteran has been given less than adequate and proper care, nevertheless only 60 per cent of the authorizations for care granted by the Veterans Administration have been used by our Michigan doctors of medicine. Example: a veteran is allowed ten treatments for his particular illness; the doctor who would have been paid for ten treatments finds the patient needs but six treatments to effect a cure; the government has been spared the cost of the additional four treatments. This record indicates that the doctors far from being greedy as is occasionally charged have given veterans the best care they knew with results beneficial both to the patient and to the government. That is the kind of co-operation that can be expected from a voluntary medical care program in which the medical profession has confidence.

5. It Would Enlarge Coverage of Voluntary Medical Care Plan to Include the Medically Indigent

The value of such plans is not disputed. It is only their limited coverage which seems at fault. S-545 is a remedial measure which will go far to extend the coverage of these plans so that any person who so desires can receive their benefits.

In others words, it will provide coverage for that income group known as the medically indigent—those who can provide themselves and their families with the basic necessities of life, i.e., food, clothing and shelter, but may not be able to protect themselves financially against unpredictable illness. This group represents a good percentage of the people of such an area as Traverse City. By the extension of such coverage as is given by voluntary pre-paid medical care plans to the medically indigent, S-545 will render a second great service.

Service Can Be All-inclusive

If particular groups are included under the Taft-Ball-Smith-Donnell Bill, such as clients of old age assistance, aid to dependent children clients, welfare clients and others now being cared for under other government plans, the voluntary group medical care plans can include them, similar to the manner in which they have accommodated the Veterans Administration and its great pressing problem—a plan which works equally as well in my community of 25,000 population as in the largest cities of the state.

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Highlights of State Health Legislation, 1947

The few bills listed below are highlights of some 60 bills in the 1947 Legislature which dealt directly with or touched the practice of medicine. Report on all measures will be published in the August JMSMS.

The following bills were passed by the Michigan Legislature of 1947:

H.B. 451. This Act will implement in Michigan the provisions of the Federal Hospital Survey and Construction Act. As passed, the law is almost verbatim with the recommendations made by the MSMS Executive Committee of The Council. It calls for a Director to be appointed by the Governor to administer the act with the help of an Advisory Council. No crippling amendments were included in the bill as finally passed in spite of sundry attempts of a cultist organization to use it as an opening wedge for entrance into medical hospitals. The Act specifically provides against any attempt to use the provisions of the law to socialize medicine. Much of the credit for passage of this Act is due Representative Howard Estes of Birmingham, the introducer of the bill.

S.B. 274, 275. As passed these Acts will raise per diem hospital rates under the Afflicted and Crippled Children's Acts to \$11 and the maximum surgical fee in the Michigan Crippled Children Commission fee schedule to \$90, a 20 per cent increase. (See *You and Your Business*, page 746)

S.B. 201. As passed this law will license and regulate vivisection. No damaging amendments were made to the bill as originally drafted, despite bitter activity by antivivisectionists aided by the vigorous promotions of a chain—newspaper.

S.B. 378. This Act will require immunization against diphtheria, whooping cough and smallpox as a condition precedent to entrance in school.

The following bills failed of passage:

S.B. 215. This bill would have permitted osteopaths to certify for the commitment of the insane to mental disease hospitals. It was passed by the Senate, but died in a House Committee despite extreme attempts of the osteopaths to make it a law.

H.B. 404. If passed, this proposal would have

excepted the chiropractors from the provisions of the Basic Science Law.

H.B. 405. This bill would have recognized naturopaths as a profession by licensing and regulation.

H.B. 166. Would have provided for licensing of industrial medical assistants, thus dignifying factory first-aiders with professional status.

H.B. 416. Would have regulated and controlled the sale of pets. This was an antivivisectionists' bill.

H.B. 495. If passed, this legislation would have prohibited vivisection and the sale of animals for vivisection purposes.

H.B. 439. Would have limited Blue Cross Plans to participating hospitals only and limited cash awards to the return of one year's premium. It was reported from Committee to the House floor, but after a heavy skirmish was referred back to Committee.

HEALTH PROPAGANDA PROBE DEMANDED

Free Press Wire Services

WASHINGTON, July 3, 1947.—A House expenditures committee has asked the Justice Department to proceed against six Federal agencies to stop what the committee called illegal expenditures on "propaganda" to influence Congress.

The propaganda program, the committee charged in a report, was designed to build up public demand for enactment of the Wagner-Murray-Dingell bill providing compulsory health insurance.

The committee said key personnel in the agencies planned to set up "health workshops" in strategic areas, for the purpose "of propagandizing farm and labor leaders to build up an artificial, federally-stimulated, public demand" for the legislation.

Citing a law against use of Federal funds for the purpose of influencing legislation, the committee named as "known to have participated in this campaign" the United States Public Health Service, the Children's Bureau, the Office of Education, the United States Employment Service, Agriculture Department and the Bureau of Research and Statistics of the Social Security Board.

The committee said the evidence indicated that workshops, held in Saint Paul, Minn., and Jamestown, N. D., were planned, conducted, and largely financed with Federal funds.

It added that pamphlets and propaganda material were prepared to be distributed under the imprint of the CIO.

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Michigan Rural Health Conference

September 18-19, 1947

The first statewide Rural Health Conference in Michigan will be held at Michigan State College, Thursday and Friday, September 18-19, under the sponsorship of the Michigan State Medical Society with the co-operation of twenty-five other state organizations interested in rural health. H. B. Zemmer, M.D., Lapeer, has been named Chairman and Hugh W. Brennenman, Lansing, Secretary of the Conference.

The purpose of the Conference is to explore the needs and problems of health in rural areas. A constructive statewide rural health program and a stimulus to action are expected to result from the deliberations.

This meeting is the result of joint action by the Rural Medical Service Committee and the Public Relations Committee of MSMS. It is an implementation of Organizational plans of the MSMS Public Relations Plan which calls for "activity in connection with other Michigan groups interested in medical care and health."

Members of the Committee on Arrangements for the Conference are: H. B. Zemmer, M.D., Lapeer, Michigan State Medical Society; J. K. Altland, M.D., Lansing, Michigan Department of Health; W. G. Armstrong, Niles, Michigan State Grange; R. J. Baldwin, East Lansing, Michigan State College; C. L. Brody, Lansing, Michigan Farm Bureau; Mildred Cardwell, Lansing, Michigan State Nurses Association; Graham Davis, Battle Creek, W. K. Kellogg Foundation; Carleton Dean, M.D., Michigan Crippled Children Commission; Ira Dean, Grand Rapids, Michigan Association of Welfare Boards and Board of Supervisors; Milon Grinnell, East Lansing, Michigan Farmer; A. J. Phillips, Lansing, Michigan Education Association; R. W. Tenny, East Lansing, Michigan State College.

Among co-operating organizations are: Michigan State College; Michigan Education Association; Michigan Foundation for Medical and Health Education; Michigan State Grange; Michigan Farm Bureau; Michigan State Social Welfare Commission; Wayne University Medical College; Michigan Department of Health; Ingham County Medical Society; Michigan Medical Service; Michigan State Nurses Association; Michigan Tu-

berculosis Association; Michigan Hospital Service; W. K. Kellogg Foundation; Michigan State Pharmaceutical Association; Michigan State Medical Society Women's Auxiliary; Michigan Hospital Association; Michigan Society for Crippled Children and Disabled Adults; American Cancer Society, Michigan Division; Michigan Crippled Children's Commission; Michigan Farmer; Michigan Junior Farm Bureau; Michigan Health Council.

The Program of the First Annual Michigan Rural Health Conference will be published in the August Number, JMSMS.

119 SCIENTIFIC AND TECHNICAL DISPLAYS

At the 82nd Annual Session of the Michigan State Medical Society, scheduled for Grand Rapids, September 23-26, 1947, 119 interesting and instructive exhibits will be located in the Exhibit Hall of the Civic Auditorium. They will remain open for your inspection from Tuesday noon until 5:00 p.m. on Tuesday, Wednesday and Thursday; and until 11:30 a.m. on Friday. Two hundred and seventy-seven demonstrators will man these exhibits, for the convenience of the estimated 1,800 physicians who will attend the MSMS convention.

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the art of eating

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1. J. South Carolina M. Assn.
52:186 (July) 1946.



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An appeal was made by the Michigan Physicians Committee for help in carrying on their work. Response has come generally from the

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H. P. Mix

state but one outstanding contribution has appeared.

Dr. Witwer, Secretary-Treasurer, writes:

I am enclosing herewith a letter, together with a check, from Doctor H. P. Mix, of Riverside, Michigan. While I think we all appreciate the splendid sentiment expressed in this venerable gentleman's letter, I personally do not feel that I would care to assume the responsibility of accepting or rejecting this check; but, my opinion is that a man who has reached this age should not be expected to make any sacrifice, which is what this contribution probably represents; but I shall abide by your decision, whatever it may be.

that is truly worth commendation. We are glad to publish Dr. Mix's letter and a photostat of his check, which we hope and believe the officials returned with heartfelt thanks.

Riverside, Michigan

Dr. E. R. Witwer

Dear Doctor:

Would like to make remittance more but owing to reduced income and continued outgo, cannot spare more. My age, 96 coming October, see MEDICAL JOURNAL 1946, "State's oldest physician," is allowing very few medical fees at the present.

Wishing you best of luck for your fight for Doctor's rights, I am fraternally yours,

H. P. Mix, M.D.

PEDIATRIC CONSULTANTS

The Michigan State Medical Society is sponsoring a program of postgraduate education in pediatrics in co-operation with the Michigan Department of Health and the Departments of Pediatrics and Postgraduate Medicine of the University of Michigan.

William J. Morrow, M.D. and James C. Beesley, M.D., who have appointments on the staffs of the Pediatrics Department of the University of Michigan and the Bureau of Maternal and Child Health of the Michigan Department of Health, are the pediatric consultants in this program. These men will alternate for periods of four months at the University of Michigan and in the field. At the University of Michigan they will conduct short postgraduate courses in pediatrics, and in the field they will be available for pediatric consultant services to physicians. The field-work began

July 22 in Midland County and extended into the counties of Gratiot, Isabella, Clare, Manistee-Benzie, and Wexford, ending August 29.

The postgraduate courses in pediatrics at Ann Arbor will be of two weeks' duration and will be conducted for physicians in groups of three or four. Physicians will pay for their own maintenance in Ann Arbor, but there will be no charge for tuition. Physicians who wish to make applications to take short courses in pediatrics should write to the Committee on Postgraduate Education, Michigan State Medical Society, Room 2040, University Hospital, Ann Arbor, Michigan. Requests for field services of the consultants should be made to the Bureau of Maternal and Child Health, Michigan Department of Health.

JOUR. MSMS



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JULY, 1947

Say you saw it in the Journal of the Michigan State Medical Society

Premedical Education

For some years it has seemed desirable to provide an opportunity for teachers of premedical students to meet with medical educators and admission committees to discuss problems of mutual interest. Accordingly, Alpha Epsilon Delta, national honorary premedical fraternity, sponsored such a conference at the University of Louisville on February 21 and 22, 1947. The conference was attended by representatives of nine medical schools and nearly seventy undergraduate colleges and universities in the five-state area of Ohio, Indiana, Michigan, Illinois, and Kentucky.

The conference comprised two main sessions: One dealing with problems of the natural sciences in premedical and medical education and the other dealing with the problems in the social sciences and humanities in relationship to premedical and medical education. The first session was keyed by a paper by Dr. John L. Caughey, Jr., Assistant Dean of the School of Medicine of Western Reserve University. This was followed by nearly three hours of discussion from the floor. The second session was similarly led off by a paper by Dr. Paul F. Bloomhardt, Professor of Biography, Wittenberg College. This also was followed by more than two hours of floor discussion. The dinner meeting on the evening of February 21 was addressed by Father Hunter Guthrie, Dean of the Graduate School of Georgetown University. His subject was "The Need for Liberal Arts in a Premedical Education."

Deep interest and concern was evidenced regarding the methods, content and direction of current premedical and medical education. There was almost unanimous agreement that we have tended to overemphasize the science content of premedical education to the neglect of the social sciences and humanities. It was evident that there is much concern with the state of our society, with recognition of the tremendous social turmoil, the instability and indecision that characterize the present. It was felt that the medical profession, both in its educational processes and in practice, must become more cognizant of and responsible for the social ills that beset us. The plea was voiced by all the medical educators present for men and women of high character, ideals, social consciousness and conscience, maturity and stability to deal with the problems of our society.

There was complete agreement among both premedical and medical teachers that students preparing for the study of medicine should be thoroughly grounded in the fundamentals of physics, chemistry and biology required for admission to medical school but no more; and that they should be encouraged—and even required—to take more courses in the social sciences and humanities. All agreed that piling up credits in science far beyond those required for admission was undesirable and to be discouraged. It was recommended that students take the full four-year liberal arts course leading to a bachelor's degree with about 50 semester hours in the natural sciences and the remaining 70 to 80

hours in the social sciences and humanities. It was urged that statements to that effect be included in the bulletins of the medical schools and suggested that such statements be solicited by the sponsors of this conference for that purpose.

Many medical educators feel that foreign language requirements for admission to medicine should be dropped. At the same time, it was felt that foreign languages should be retained in the college degree programs as a part of the liberal education the degree should imply. It was suggested that so far as the medical schools are concerned Greek and/or Latin might well be used to satisfy the language requirements in the colleges as these languages provide a more useful basis for scientific and medical terminology than modern languages do.

It was generally stated to be the practice of admitting officers to select their freshman students on the basis of three factors: first, an estimate of general scholastic ability and performance, as a working rule requiring about "B" averages for acceptance; second, personal qualifications, including character, social personality and emotional stability as indicated by interviews by the admission committee and recommendations of premedical educators; and third, the results of the Aptitude Test and in some cases the Graduate Record Examination.

The moral and religious aspect of education was presented in Father Guthrie's paper. His remarks produced a strong impression on the group, indicative of the growing concern for the problems we face in that area of education.

Altogether, the conference was unusually well received and all attending appreciated the fact that the program included all three aspects of education—the natural sciences, the social sciences and humanities, and the moral and religious. A complete report, including the papers and discussion, appears in the May issue of *The Scalpel*, official magazine of the fraternity.

HUGH E. SETTERFIELD,
National President, Alpha Epsilon Delta

EXTENDED SERVICES MMS

Periodically it has been proposed by groups of doctors that Michigan Medical Service extend its coverage to operations in the home and office, in order to relieve the tension on the hospital beds, and to make more services available to subscribers. This has not been feasible, but at the last meeting of the Board it was voted to take certain selected groups and make available certain specified services to be performed outside of the hospital. These are services now scheduled for twenty dollars or over. This is an experimental program to determine costs and feasibility, and is limited as to groups, services, and time.

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Political Medicine

START HEALTH INSURANCE PLAN, TRUMAN ASKS

Washington, May 19 (AP)—President Truman asked congress today to make at least a start at this session on a national health insurance program.

Some senators already are preparing legislation. But with the Republican leadership planning on a July 31 adjournment and much business still remaining, prospects for the health program appeared uncertain.

Mr. Truman's message, completed at Grandview, Mo., over the week end and sent to the Capitol today urged "a national health insurance program" which would provide money to all persons covered by it for two purposes:

1. To pay their necessary hospital, doctor bills and dentist bills.

2. To reimburse them, at least in part, for earnings lost by "illness or disability" not connected with their work.

Leaves Details to Congress

The message indicated that the President wants all men, women, and children in the country to be assured of "needed medical attention" by the insurance plan. But he left to congress the details as to just who would pay the premiums, and how much should be contributed directly by those paying the premiums and how much by the federal treasury.

When the President first presented his recommendations to congress in 1945, the White House called the plan a "compulsory" system in which all wage earners would be required to participate, as they must now in the social security program.

The word "compulsory" did not appear in today's message, although reference was made to the 1945 proposals. And today's paper said that the program should be one by which "all people who are covered by it" would have their necessary medical expenses paid.

Taft Favors Volunteer Plan

Sen. Taft (R., O.), among other congressional leaders, favors a voluntary health insurance plan, in which citizens would be free to participate or not as they choose. He also wants emphasis on local administration.

Mr. Truman wrote that "a national health insurance plan can and should provide for administration through state and local agencies, subject only to reasonable national standards."

The 1945 message declared that "this is not socialized medicine," in reply to opposition arguments advanced earlier on that angle. Today's message contained no direct allusion to that argument, but it asserted that:

"Under the program which I have proposed, patients can and will be as free to select their own doctors as they are today. Doctors and hospitals can and will be free to participate or to reject participation."

Urges Other Projects

The chief executive also called anew for congress to set the federal government at work on three other matters he recommended in 1945. These are to provide:

- "1. Adequate public health services, including an

expanded maternal and child health program.

- "2. Additional medical research and medical education.

- "3. More hospitals and more doctors—in all areas of the country where they are needed.

"I am pleased to observe that important advances were made by the last congress toward realization of some of the goals which I set forth in my earlier message," Mr. Truman wrote. "But we must not rest until we have achieved all our objectives. I urge this congress to enact additional legislation to authorize the program I have outlined, even though the fulfillment of some aspects of it may take time."

Greatest National Resource

The President declared at the outset:

"Healthy citizens constitute our greatest national resource. In time of peace, as in time of war, our ultimate strength stems from the vigor of our people. The welfare and security of our nation demand that the opportunity for good health be made available to all, regardless of residence, race, or economic status."

His earlier message recalled that 5 million men, one-third of those examined, were rejected in the draft.—*Chicago Tribune*, May 20, 1947.

OPPOSITION IN 1934; SUPPORT IN 1947!

Nathan Sinai, Dr.P.H., Ann Arbor, subscribed to the following statement in the report to the MSMS House of Delegates in April, 1934, re his study of health insurance in England in connection with the proposed "Mutual Health Service," under consideration at that time:

"In presenting this report your commission wishes to record its opposition to the introduction into the United States of any system of health insurance now existing in any country in Europe. No system conforms at present with all the policies adopted by the Michigan House of Delegates in July, 1933.

These policies are:

1. Free choice of physician by the insured.
2. Limitation of benefits to those of medical service.
3. The control of medical service benefits by the profession.
4. The exclusion of individuals or organizations that might engage in health insurance for profit."

(The italics are ours.—Ed.)

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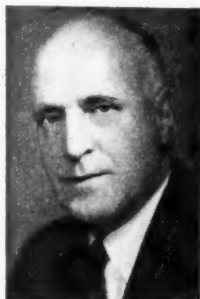
VOLUME 46

JULY, 1947

NUMBER 7

Development and Use of the Psychiatric Out-Patient Department

By Arthur H. Ruggles, M.D.
Providence, Rhode Island



THE NEED for preventive psychiatry has long been recognized, but received its greatest impulse during World War II and the postwar period following.

I am sure we all agree that one of the very best services in preventive medicine is the adequate out-patient department.

My remarks will be confined to the neuropsychiatric clinic, but many of the inferences may well be applied to other specialties.

In the field of the neuroses, early out-patient treatment is generally accepted to mean the attempt to prevent chronicity and hospitalization, with their attendant costs in time, money, personal happiness, social and economic dislocation. But to my mind, it means more than that. It means on the positive side, an opportunity to help people to function more effectively, live more fully, get a perspective on themselves and their situation. Like Chinese doctors, I visualize the job of the neuropsychiatric clinic of the future as primarily to keep so-called normal people well and happy, by giving them an understanding of themselves and the meaning of their behavior, by seeing them through crises, which might swamp them

unassisted, or lay a pattern of defeat, (as is possible, under given circumstances, with any one of us here in this room), and by helping them to realize their potentialities and accept their limitations.

One of the great therapeutic advantages of out-patient care, especially in the field of emotional maladjustments, is that during treatment the patient is usually able to remain at work (clinics should provide at least one opportunity for evening appointments) and live at home (provided the home environment is good); so that he has the security of a job, the help of his family, and can work through his difficulties and practice his newly won attitudes in his normal surroundings, as might not be possible in the more artificial environment of a hospital.

In the past, many of our out-patient departments have been organized and conducted on an antiquated basis, being dependent on the *voluntary* services of the out-patient staff. This was based on the old idea of the apprenticeship system, which held that the young physician must gain his experiences via the OPD route without remuneration. As someone once put it (I am afraid with a good deal of justification), "The poor are God's greatest gift to the interne."

Under this system, the young physician struggling to make a living, necessarily cut the out-patient corners, if he could see a paying patient before he reported to the clinic, or by leaving the clinic early in order to keep an appointment at his office. There was seldom adequate time for careful investigation and treatment of cases. Patients would come in at 9 o'clock in the morning, perhaps to be seen only at noon. In the meantime, they sat huddled on the benches, irritated or dispirited by the monotonous waiting, regaling each other with their manifold symptoms; until it

Presented at the Eighty-first Annual Session of the Michigan State Medical Society at Detroit, Michigan, September 26, 1946.

JULY, 1947

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was not uncommon that a neurotic, by the time he saw the doctor, had added to his original symptoms several more which he had acquired from his fellow sufferers.

When the patient's turn finally came, examination too often was cursory. His physical complaints were often discounted as neurotic imaginings, and insufficient medical investigation made. Social investigation, in the sense we know it today, with the emphasis on the individual and his environment, was almost non-existent; concern being centered, usually, on the economic status of the patient's family and their sources of income. The patient-load per doctor was heavy. It was not uncommon for a physician to try to see five new cases and twenty old cases in a single brief morning. In the parlance of the soldier, many patients inevitably got the "brushoff." The last patient seen, all too often was only asked, "What do you complain of?" The hurried answer most frequently was insomnia, nervousness and lack of appetite. The doctor's response, "I'll give you prescription No. 17. Take a teaspoonful three times a day and come back in three weeks, if you do not feel better." When the patient did return, it sometimes happened that he saw a different doctor, the first doctor having served his period.

Under these circumstances, it is understandable that the patient's condition often remained undiagnosed and was therefore inadequately treated—if this procedure can be dignified by the term "treatment." Equally important, the patient himself keenly felt the superficiality of this approach, resented being treated as a number, and had little confidence in the therapeutic effects of the prescription or the advice handed out to him. The resistance of a considerable number of veterans to OPD community clinics is, in my opinion, largely to be attributed to the impression created by these "charity clinics" of old.

Against this out-dated organization, what is our concept of a model neuropsychiatric out-patient clinic today? Most of us have certain ideas about it; much has been written and theorized about it; but when we look about us there appears, in actual practice, to be a good deal of divergence with regard to the organization and operation, and even orientation, of existing psychiatric clinics. In short this may be attributed to the shortage of trained personnel, resulting in unavoidable compromises under pressure of necessity. But even more, it

would seem to be due to a lack of a clear concept as to what constitutes *adequate* out-patient care. The truth is, we are on the threshold of a new era in psychiatry, with the major concentration on the nervous and emotional difficulties of normal individuals in their daily living, rather than the abnormal, requiring custodial care. The experience of the Army and the Navy during the war pointed this out: most of the work of the military psychiatrist was concerned with keeping personnel on the job or returning them after brief hospitalization, to their posts; only a small fraction of their time was devoted to psychotic patients. The same swing is taking place in civilian psychiatry. Yet in the department of out-patient treatment, we are without the orientation and pattern we have developed over the years for in-patient care. We still have to clarify our therapeutic goals more specifically, to establish more clearly our criteria for referral, to determine what is the most efficient organization, the most effective procedure and the estimated cost of qualified out-patient care. This can only be acquired on the basis of factual data, gathered at the source. Military experience has given us a fine start, but it was a specialized situation; we have a growing group of able young psychiatrists trained in psychotherapy or in training; and we have a growing number of highly qualified mental hygiene clinics blazing the way for what the modern neuropsychiatric out-patient department should ideally be.

On the basis of our experience at Butler Hospital—albeit our Out-patient Service has been in operation only nine months—and of my own contact with war psychiatry, I propose to outline what to me seem some of the significant characteristics of a clinic offering *adequate* psychotherapy. We do not presume, at Butler Hospital, to have all the answers; we ourselves are still groping; but we have, from the beginning, considered our out-patient clinic as a therapeutic research project and to this end have kept more exhaustive and detailed records than ordinarily indicated.

In the first place, it clearly appears that adequate out-patient treatment necessitates a *full-time paid medical staff*, as against the old system of voluntary service. The staff should be organized as a team, consisting of psychiatrist, clinical psychologist, psychiatric social worker and psychiatric nurse. The number of representatives from each of these professions will be determined by the

case-load. Ideally, it seems to me that there should be one psychiatrist for every two new patients and three old patients seen in the morning, or evening. The psychiatrist in charge of the clinic must be thoroughly versed not only in modern psychotherapy, but in good medical practice; he should have an apprenticeship in a mental hygiene clinic, a wide experience with and understanding of normal behavior and the departure from it. Needless to say, the other members of the team should also have a thorough understanding of the modern principles of dynamic psychiatry. The dearth of professional personnel at the present time, makes it impossible sometimes to assemble a team, every member of which is fully trained and experienced; hence the importance of a supplemental training program conducted by means of regularly scheduled staff conferences. The staff conferences, of course, are vitally important for therapeutic reasons; it is here the Chief brings together all the findings, defines procedures aimed at the effective integration of the various departments of the clinic, and heads up the treatment program.

In the second place, instead of the system of gathering large groups of neuropsychiatric patients together often for hours at a time, there should be a *strict appointment system*. No new patient should be given an appointment of less than one hour for the first visit, and follow-up visits should average at least one-half hour each. Not only should patients be seen only by appointment, but they should be seen promptly when they appear for their appointments. This is especially important with patients with neurotic conditions, where anxiety and exaggerated feelings of self abasement so often play a part.

Thirdly, the importance of *comprehensiveness and thoroughness of examination* cannot be over-emphasized. Every patient should be given a complete physical and neurological evaluation of structural and physiological aberrations. At Butler, all laboratory and medical facilities of the hospital and its consultants are drawn upon. This may mean a consultation with the gastroenterologist, or with the laryngologist, or with the otologist, as well as with other specialists. Reports of these specialists are made in writing and included in the final résumé of the case by the psychiatrist in charge of it. As general medical men, you will be interested to learn how fully this consideration of the organic aspects has justified itself in our experience. In about

one-third of the cases seen, previously unrecognized or insufficiently treated physical conditions were discovered, which were basic to the patient's "nervous" condition, or had a direct bearing on it; such as a case of Hodgkin's Disease, tuberculosis and several cases of severe malnutrition.

The psychiatric examination may precede, follow or be interspersed with the physical examinations and tests. There is no set sequence at our clinic. The order depends somewhat on the availability of the various staff members and specialists; but primarily it is determined by the mood and concern of the patient himself. If he has a great need to unload, the psychiatrist may let him unburden himself and just talk uninterruptedly and unhurriedly for the first two hours. If, on the other hand, his anxiety centers on the "pains in his chest," it may be that a physical examination and possibly an x-ray would relieve his mind most. If his primary concern is his fitness to do a certain job or his desire to enter another field, it may be that he will first be sent to the psychologist for vocational aptitude tests.

The psychiatric examination includes history taking, psychological tests (including the projection techniques, such as Rorschach and Thematic A perception) and the first exploratory interviews with the psychiatrist (sometimes aided by pentathol). In our experience, we have found that eight hours is required on the average for history taking, complete physical examination and such psychological and laboratory tests as are indicated. The number of preliminary interviews with the psychiatrist will vary with the individual case. Actually, as with all other investigations, examination is a part of treatment, and there is no fine line that can be drawn between them. Indeed, the thoroughness of the examination, to a great extent, lays the foundation for the confidence of the patient in the treatment.

Definite treatment can only proceed on the basis of such careful studies. It is only when all the evidence is in, that the patient gradually emerges as an individual, not as a "case" of insomnia, or depression, or anxiety, but as Jimmy Jones, with his unique constitutional make-up and experiences, his personal motivations, his own family and work situation, whose symptoms may mean one thing to him and quite a different thing to another patient. This seeing of the patient in-the-round, as it were, is the very crux of mod-

ern psychotherapy. It takes time, patience, and an orientation keenly sensitive to the law of individual differences.

The number of treatment interviews that follow again will depend upon the individual and his needs. It may be that he only needs re-direction and re-orientation and that a few talks will straighten him out. It may be that deep therapy is indicated, requiring treatment over a considerable period. In any event, it is understandable, that once having formed his bond of confidence in his particular psychiatrist, it is this psychiatrist and no other, in whom he will have faith to continue treatment. Hence, *continuity of treatment* is another criterion I should like set up.

In addition to the treatment interviews with the psychiatrist, it may be that the patient will want to see the psychologist again, as his insight grows and he wishes to get a realistic picture of his capabilities. It may be that a visit of the psychiatric social worker to the home of the patient will be indicated, or that the patient's family will come for an interview with her, so that they too may grow in understanding and become an active part of the team. It may be that the patient will take part in the occupational therapy program conducted by the hospital for its in-patients—which we have found a valuable adjunct in some instances also for patients under out-patient treatment.

While the out-patient service at Butler was set up as a community clinic, the veteran case-load has been given priority, and has thus far absorbed most of the staff. From the period of January 1 to August 31 of this year, one hundred and forty-one patients made one thousand forty-two visits. The average number of visits was seven per patient. During the same period, thirty-five patients were discontinued for a variety of reasons. Thirty-eight were discharged as substantially recovered and sixty-eight were still under treatment at the end of August. Ninety-two of these patients were diagnosed as psychoneurosis, five as psychosis and forty-four as various other psychosomatic or organic disorders.

As I have previously stated, an average of eight hours is consumed on history taking, physical examination and psychological and laboratory tests. These eight hours are usually not considered as eight visits. Often three or four hours may be consumed in history taking and physical examination

and be counted as one visit. I want to make it clear that we cannot generalize too much, as our whole tendency is to individualize, but you will see that the figures stated of one hundred forty-one patients making one thousand forty-two visits, bringing the average number of visits per patient up to seven, would be misleading if I gave you the impression that each hour counted as one visit.

The results of such comprehensiveness, both of examination and treatment, summed up in the words of the Chief of our Out-patient Service, Dr. David G. Wright, may be; "there seems to be no doubt that the patients in general are strongly supported by, and very much appreciate, the attitude of the Out-patient Service, with its continuous emphasis on the most thorough investigation possible and the expenditure of whatever time is necessary to work through both the primarily somatic and primarily psychic aspects of the illness involved. An aspect of medical care for which the typical patient has felt, and has had, a great need, would appear to be that of being treated as a whole. He is a total organism complete with a body, thoughts, feelings and attitudes, inseparable from the environment in which he is functioning, and it would appear that he must be treated as such. In general, the patients have appeared to be most co-operative, appreciative and gratified by the treatment they received, whether or not speedy symptomatic improvement has taken place. Except in isolated cases, very few appointments have been broken without notice and without later communication from the patient in explanation. Where the patient terminated the treatment himself, it was usually for good reasons."

What are some of the comments of the patients themselves, as made to the members of the clinic's staff, or as we hear them from the doctors, the referring agencies, or their families? In their own words, what is it the patients say?

"There's no waiting around there; you just come in for your appointment and they see you right away. . . . They really *listen* to your story, and don't hurry you. . . . They tell you *everything* you feel or think is important. . . . I've had a buzzing in my ears for years . . . or a pain in my back . . . but the doctors always said it was imagination . . . I never could get them really to check it . . . but here they gave me the works, inside and out and when they couldn't find anything, I was satisfied, maybe it was in my mind. . . . They treat you like

you were a human being. . . . it's the first time in my life I think a doctor really looked at me and tried to understand how it felt to be *me* going through what I was."

Let me submit: what, in the final analysis, is the best criterion of the adequacy of treatment? Results count, and, as in business, it is the satisfied customer whose opinion is the crucial one. It does not matter if we, professionally, feel the patient's condition is improved, if he does not feel much better himself; it does not matter if we have examined him to our professional satisfaction, if he thinks we have ignored or overlooked what *he* feels is important to his condition. The soundest basis for successful therapy is the patient's conviction that everything possible has been done for him, *his* confidence in and appreciation of the clinic's service. And, as in business, it is *his* opinion of out-patient treatment that will "advertise" the product and "sell" it, far more effectively than any program of public education. The cloud of distrust, fear and stigma, which has too long darkened mental conditions and their treatment, will only be dispelled as the word spreads, from one satisfied patient to another: "you should go up there, they really helped me. It would be good for *anyone*, just to get a better idea of themselves, whether they are in trouble or not."—Two cases may illustrate types of patients with whom we are dealing.—

Two questions of special interest to you, I shall just briefly touch on. One is the question of cost of treatment.

It is very difficult to get an accurate cost accounting of such treatment, but our best estimate, which we feel is undoubtedly a low one, is that the cost per visit is \$8.65.

This may seem to be an expensive type of treatment, but if large numbers in the community can, by this preventive service, be given efficiency on the job and be comfortable in their inter-personal relationship for approximately \$100.00, it is indeed a low financial expenditure. Especially in contrast to that necessitated by leaving the job and having weeks or months or perhaps permanent hospital treatment. We feel that in providing care for veterans, the medical profession must determine what adequate out-patient treatment is, and that the government must be prepared to pay for such adequate care, in service-connected cases, the cost of which may seem very great at the moment, but

we believe that by such adequate care, a large amount of the tax payers' money can be saved for the future.

The other question that may be in your minds is: Whom should you refer for psychiatric out-patient treatment? By what indications shall you decide that here is a man who complains of insomnia, whom you yourself, with your intimate knowledge of the patient and his family situation and his confidence in you as his family doctor, can probably help; and here is another, with a similar complaint, yet who should have specialized treatment? This is no easy question to answer in an hour or in a book, let alone in a few sentences. For it depends, of course, on the individual case. When pressed for a brief guide that will be practical and yet not too limiting, however, I have submitted two general criteria: one is the *disruptive effect* of the symptom, the other its *duration*. If you have a patient who is suffering with insomnia or nervous headaches to such an extent that his work is seriously affected or his home life jeopardized, and if this condition has *continued without improvement* over a period of time—let me say, for three or four weeks—despite efforts to help him, I would say that such a patient should be referred for psychiatric attention.

Case Record

Case 1.—Patient, S. W., aged twenty-five, single, unemployed at time of referral. Twenty-three visits over a seven-month period. Previous to Army service extremely out-going, active, competitive, social, and having a consistently good work record.

Brought up from earliest infancy by a sister twenty years his senior, married and unable to have children of her own. An unusually strong affection and identification with his sister-mother. Combat infantryman with ten months front-line combat in Italy with every man in his platoon a casualty. He, himself, wounded by sniper fire and evacuated because of wounds. Considerable portion of muscles of the right thigh destroyed and one testicle shot off. Appropriate tension during combat, present symptoms developing only after hospitalization for wounds.

Present symptoms, nausea, gastric distress, extreme irritability, depression, complete inability to associate with people or enjoy former interests. No significant physical findings. No significant laboratory abnormalities, x-ray of the chest and gastrointestinal series well within normal limits. Rorschach and TAT tests indicate average intelligence with functional impairment including constriction, stereotypy and lack of ability to establish normal relationship with people; feelings of anxiety and inadequacy indicated. Anxiety apparently tied up with own sexual organs and battle experiences. TAT content evidencing immaturity and great need for help.

The patient spent the first few hours airing resentment and disgust at his previous treatment by doctors and their treatment of his sister who at present is suffering parallel symptoms.

With the aeration, aggressive feelings became translated more and more into increased tension and activity to the degree that he impulsively hit a man sitting behind him in a movie because of annoyance at this man's noisy shifting about in his seat. Following this, the relationship of guilt feelings to hostility was discussed and intravenous sodium pentothal was begun. Under pentothal, without any suggestion by the therapist, tremendous abreaction of feelings of aggression and guilt took place. In the first pentothal interviews patient simply lived through traumatic experiences, particularly of his being wounded and his feeling responsible for the death of a friend and his knifing German outposts in the dark; having amnesia and an inability to synthesize these matters on his emergence from the effects of the drug.

At this point he developed red spotty dermatitis of the hands and of the wrists. Allergy skin test was negative. After further acceptance of his feelings of guilt under pentothal, three months after beginning of treatment, in which he frequently used the phrase "their blood on my hands," red spots on hands cleared up and the patient lost gastric symptoms, tension and fears, and began work. Insight increased with further pentothal interviews and the patient, himself, connected guilt feelings with castration fears as appropriate punishment. By six months after beginning treatment, the patient was entirely asymptomatic for a period of a month at a time, with very brief slip-backs into depression, capable of reversal by a single interview.

The patient is now engaged to be married, is busy with all his old interests and is working steadily.

Case 2.—Patient J. W., aged twenty-eight, single, unemployed at time of referral. Sixteen visits over a four-month period; previous to Army service, consistently good work record; conscientious, rigid with many interests. Family constellations essentially healthy and balanced and supporting. Air-gunner in heavy bombardment, flying out of England over Germany; hit by large fragment of flak on his fourth raid; shot down over Berlin on his fifth raid, damaging back in parachute jump and suffering frostbite of feet; badly beaten about the head by German civilians before being made a prisoner-of-war for twenty months, in the last four months of which prolonged forced march with food at starvation level. At this time feet became flattened and denuded of skin, thighs and buttocks and axilla became covered with dermatitis; teeth and gums began to bleed and to have profuse purulent discharge. On release from prison camp and until first contact with the Clinic no effective medical help had been given.

Present symptoms, depression, almost to the point of confusion; hopelessness; complete inability to be interested in work, play or people; pain in the back, feet, thighs; extreme insomnia and fatigability; anorexia; abdominal pain and griping; continuous foul breath; recurrent thoughts of suicide. He could not eat, sleep, sit, stand, walk or speak with anyone in comfort.

Physical examination consistent with history; blood count showing increased white cells; urine showing albumin, red cells and hyaline casts; sedimentation rate increased; urea nitrogen, variable, rising at times to 37 mg.; chest and abdomen essentially clear by x-ray examination. The electroencephalogram was classified as borderline abnormal with poor regulation and unusual distribution of normal rhythms with, however, no bilateral or localizing differences.

Psychological examinations show Rorschach signs of extreme constriction of the emotional life.

Treatment of physical difficulties by intense vitamin therapy; oral penicillin; arch supports prescribed by the orthopedist; and exercises for increasing the adequacy of the circulation in the feet resulted in the clearing of his mouth, stomach, skin, foot symptoms.

Psychotherapy, with the use of sodium pentothal, resulted in the catharsis of his held-in aggressive feelings and an understanding by the patient of his feelings of guilt and fear which had developed in large measure in relation to certain of his crew members. As the depression began to lift, the patient was started on work in the carpenter shop in the hospital, and within a month was able to return to his old interests and to do part-time work.

Recurrence of several of the symptoms were related in part to flare-ups in the state of the kidney damage which he apparently had. By the end of the four-month period, however, he stated that he was in all ways quite well, working hard every day, fishing and doing all kinds of jobs about the house; he spends most evenings with his girl and has no lack of confidence in his ability to handle a job which he expects shortly to take.

MSMS

STOP—LOOK—LISTEN

STOP telling the patient there is nothing wrong with him but nerves—Don't say: "Go home and forget it."

LOOK for the facts as the patient sees them.

LISTEN attentively to patient's story.

If all persons would respect their nervous systems as they do their teeth, there would soon be as growing an understanding of nervous disorders as there now is of dental conditions.

Let the patient talk—it pays dividends

Placebos are dangerous—for the doctor to use when he doesn't know what else to do.

An ounce of understanding is worth a pound of medication.

Penny-wise and pound-foolish is the doctor who is concerned only with the physical aspects of disease.

Misuse of words may be more dangerous than the misuse of drugs.

—MICHIGAN MENTAL HYGIENE COMMITTEE

The Fundus Oculi in Diagnosis and in Prognosis

By Edmund B. Spaeth, M.D.

Philadelphia, Pennsylvania



EACH TIME an ophthalmologist has the privilege of talking before a group of medical men, not limited in their work to his specialty, he hesitates a bit, and shortly decides to "consider the retinal blood vessels." I know this as a fact from former personal experiences, and the literature proves

it quite conclusively.

The ophthalmoscope, in medical diagnosis, is probably next in importance to the microscope, though granted a poor second. Further, when one speaks of the ocular fundi, it must be either in terms of vascular pathology, or relative to nerve tissue pathology, for it is these which are significant.

Both ancient and contemporaneous medicine have demonstrated repeatedly ophthalmologists functioning (perhaps masquerading) as internists, and neurologists. The reverse has occurred, but very rarely. It emphasizes rather strongly that early attitude of prewar German medicine, as exemplified by Heine, in considering ophthalmology as a branch of internal medicine. It also calls attention to the dislike various ophthalmologists have registered, and quite properly so, in placing ophthalmology on Undergraduate Medical School Faculties under the direction of the Chief of the Department of Surgery. It is true that ophthalmology has an important surgical side as a specialty, but so also have gastroenterology and neurology. The minutiae of anatomical details necessary to ophthalmic surgery is the only difference between ophthalmology and gastroenterology in their surgical attributes. The ophthalmologist did not steal this surgery from the surgeon, instead, the surgeon released it, gave it up willingly, in fact he sloughed

it gladly and with his blessing. One only needs to read the histories of the early ophthalmic surgeons to appreciate this.

One other comment aimed toward the same point stated above: that tremendous amount of work done, in the diagnosis and classification of hypertensive and toxic forms of arteriolar pathology, by ophthalmologists, could have been carried out only by men who were essentially learned physicians in addition to being excellent ophthalmologists.

Look to your medical book salesman for two relatively recent books written by ophthalmologists,^{4,18} and a third,⁹ in which an ophthalmologist was a most important collaborator, for material in the field of general medicine significant to every branch of medicine. Thirty years ago an ophthalmologist (Leber⁸) gave medicine a monumental work in this field which still continues as the source book for most similar efforts.

When discussing pathology of the ocular fundi one must, of necessity, differentiate between basic pathology of the choroid and the retina, and in turn these two from pathology of the optic nerve, remembering that this nerve consists of the terminal centripetally directed nerve fibers from the retina. By contiguity and continuity of these tissues, pathology in one must of necessity be followed by characteristic pathological changes in the others. In addition, the individual structure controls the type of pathology possible, and at the same time modifies the essential characteristics which develop from similar basic etiological factors.

The choroid is an organ, fundamentally vascular in anatomic characteristics, and from the standpoint of this paper to be concerned with morbidity seen in and transmitted by the blood stream as well as the macroscopic and microscopic alterations common to the blood vessels themselves—arteries and arterioles, veins and venules, as well as the capillaries. In addition to this, because the choroid is the most important nutrient coat of the eye, it is functionally the *sine qua non* of retinal integrity, hence of vision. Diseases which affect it may also involve the retina even to the subsequent destruction of the retina.

The retina, with a second basic blood vessel system, one peculiarly its own, is of neural ectoderm origin and presents not only the changes from blood vessel pathology, as just discussed relative to the choroid, but also those conditions to

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which nerve tissue is heir, nerve tissue cells and fibers, both supportative and conductive—as each is individually involved, regardless of the basic etiology. The large ganglion cell bodies of the retina, the source of the optic nerve fibers to the external geniculate body, will show a selective affinity to various etiological factors quite different from that seen in another portion of the retina itself, as for example the rods and cones, and the contiguous pigmented neuroepithelium. Even the different types of nerve fibers themselves within the eye and in the cerebral pathways, respond differently to infections, to disturbed metabolic processes, and to the degenerations of senescence. The nerve fibers, both somatic and autonomic, for the iris reflex arc, and the pure visual fibers illustrate these diverse responses.

The optic nerve must be considered, ophthalmologically, as a part of the retina, as well as a separate anatomic structure. The common finding is for pathology in one of the two to be accompanied by simultaneous and/or consequent pathology in the other. This is not necessary, however. Either may show pathological changes with the other remaining essentially normal, at least normal from a histological standpoint.

There is still an additional point to be considered, at this time, relevant to this discussion. It implies nothing whatsoever pedantic in nature. The ophthalmologist should differentiate a retinosis from a retinitis, excluding one from the other—ophthalmoscopically as well as etiologically. The various forms of retinopathy could be better discussed, under all possible circumstances, if this was done more meticulously by authors and clinicians. There are so many good reasons in favor of it, and none whatsoever contrariwise.

This paper today has, as the reason for its being, the presentation to you of various diseases of the ocular fundus, the result of inflammatory diseases of the choroid, the retina, and of the optic nerve. The presentation (it is hoped) is not ophthalmic but simply medical and intrinsically narrative.

The number of conditions which could be included is not large, and of these only a rather small number is being included. They cause a retinitis, a choroiditis, or an optic nerve neuritis, or any one of the possible combinations of these three structures.

Tuberculosis and syphilis, the retinal changes from such pyemic conditions as bacterial endo-

carditis (subacute especially), the fundus findings in septicemia, and the chorioretinitis of such conditions as vaccinia and toxoplasmosis are to be discussed. The qualifying term—inflammatory—limits the paper rather sharply, but purposely.

Tuberculosis periphlebitis, tuberculous periarteritis, primary retinal tuberculosis, tuberculous chorioretinitis, the acute and chronic forms of miliary tuberculosis, primary tuberculosis of the optic nerve, massive tuberculoma of the fundus (probably an extensive form of choroidal tuberculosis), and extension of tuberculous pathology from other ocular structures are the usually accepted types of this disease. Retinitis exudative, probably better known as Coats' Disease, has at times been considered a tuberculous inflammatory condition but not so by Coats² himself. Leber¹⁸ assumed, according to Elwyn⁶ an inflammatory and necrotizing process in the retina to be the cause, but Leber's own microscopic findings eliminated this process as such, and placed it in that class, shown by Elwyn, to be due either to an abnormal constitution of the blood itself, or to a primary change in the blood vessels, especially the smallest of these.

Tuberculous periphlebitis, also known in part as Eales disease,³ is a disease usually of the late second and third decade of life, characterized by recurrent retinal and vitreous hemorrhages, a marked proliferation of connective tissue about the retinal veins and into the retina, and results not uncommonly in blindness either by retinal separation or because of a secondary glaucoma. The course of the disease may be long in duration, with repeated recurrence and with intervals of quietude.

Schmidt¹⁵ called our attention to the irregular relationship this has to generalized tuberculosis, especially the pulmonary form. In eight cases which he studied and followed, three showed tuberculosis of the lymph nodes, the possible source of the ocular infection; one case had a tuberculous focus in a tonsil, and in four cases the ocular disease preceded manifestations of tuberculous pulmonary disease, in one case by as much as three years. Schultz¹⁶ also was certain that this disease is due to a tuberculous process in the vessel wall and bases his treatment, because of this, upon rest, diet, and tuberculin therapy.

A case of this, unilateral, in a male, studied microscopically, by de Long and the author,¹⁷ showed well the massive perivascular changes

present in the fundus. This patient has had no change in his basic, primary tuberculous condition, which was that of a cervical adenitis, nor has the left eye shown any fresh pathology for over five years. The bacillus tuberculosis has been recovered in several instances, from the retinal phlebitis; this, with the positive skin sensitivity test, plus a significant history, in many cases, seems to confirm the diagnosis and etiology.

Retinal phlebitis, limited wholly to the central retinal vein, has been reported, but it is a very rare condition. Retinal periarteritis has also been found, though perhaps even more rarely. In one case reported by Muncaster and Allen,¹¹ the retinal vessel pathology seemed to be precipitated by the intradermic use of tuberculin—suggesting an allergy-like etiology for these vascular conditions.

Primary retinal tuberculosis and tuberculoma of the choroid, though separate entities, may be considered together, for our present purpose. These conditions progress to the secondary involvement of other portions of the eye, and usually end in an imperative enucleation because of caseous necrotic degeneration of the eyeball. In three cases seen by the author, two have, over a period of four to six years, shown no other new clinical signs of tuberculosis. The third case progressed to extraocular extensions of the tuberculoma, with severe exophthalmos before death occurred from extensive tuberculous pulmonary pathology.

Tuberculous choroiditis, with its consequent retinal involvement, including chronic miliary tuberculosis, also including that rather interesting form of chorioretinitis with pathologic sectioning of the optic nerve fibers at the optic nerve disc margins, known as chorioretinitis juxtapapillaris, are common diseases of the ocular fundus. No anatomic portion of the fundus is spared, and there is no predilection for the ocular blood vessels. These conditions are chronic, with frequent recurrences, and with the formation of new lesions in fresh portions of the fundus. They are diseases of early adult life, and are apparently a bit more common in females. These conditions have an onset of sharp inflammation, followed by self-limitation of the lesion, by necrosis of the inflammatory area and pigment deposition. A quiescent chorioretinitis remains, showing areas of atrophy of the retina and the choroid (the sclera being bared); these lesions rimmed about with deposits of pigment, and frequently with some residual pathologi-

cal vascularization. Desseminated chorioretinitis, as outlined above, frequently fails to show other positive clinical signs or symptoms of tuberculosis.

The active tuberculin skin sensitivity reactions, even in very small dilutions, and the focal reaction to these seen in the fundus lesions are the indicators to the etiology.

This type of fundus pathology has an unusual relationship to systemic disease. Two characteristics are outstanding. The first is the marked remedial effect which desensitization with tuberculin has upon the course and progress of these conditions—suggesting, in fact almost demanding, some allergy-like relationship between tuberculosis antibodies and the fundus pathology. The second is this: almost twenty years of experience as an associate consulting ophthalmologist, and then later as consulting ophthalmologist to a very active Municipal Tuberculosis Hospital have failed to uncover a single such case. These years instead have shown a number of cases of acute generalized miliary tuberculosis with true miliary tubercles in the fundi. These cases all died, frequently of tuberculous meningitis.

One cannot help but agree that these varied conditions, and not including tuberculous lesions of the iris and the sclera, though all tuberculosis, are each a distinct clinical entity. One acute miliary type is the result of a fatal bacteriemia; the other is an allergy, and reacts as such; one results in classical caseation necrosis; another in the formation of sheets and bands of scar tissue without demonstrable necrosis; one involves only the blood vessels (an artery or the veins); another attacks nonvascular tissues—one the retina, the other the choroid; and each of these has its characteristic appearance, and its individual course. Considering this, there is some reason for the lack of unanimity among ophthalmologists in the treatment of these allied but varied conditions.

Syphilis, like tuberculosis, can involve practically each different anatomical structure of the eyeball in a clear-cut distinct pathological entity. The changes seen in the fundi result from either a congenital or an acquired luetic infection and each is fairly distinctive in character. Syphilitic chorioretinitis may be a manifestation of secondary lues, though it usually is tertiary, and intraocular gummata are still seen occasionally. This type of case, and that seen with secondary lues, are becoming rather rare—probably because of recent changes in therapy.

Neuritis of the optic nerve may be a primary ocular condition resulting in a postneuritic type of optic nerve atrophy. A descending type of optic atrophy may appear, originating in the syphilitic cerebrospinal pathology of taboparesis.

There has been some controversy as to whether these fundus conditions (excluding primary pathology of the optic nerve) are either choroiditic in character, with secondary retinal involvement, or the reverse. Nettleship¹² believes that both occur at different times. Clinically one can see cases in which the retinal vessels show syphilitic inflammation with the choroid free from pathology. Igersheimer's⁶ opinion is that in syphilis the organisms are transmitted by the blood stream and cause the retinal, choroidal, neural, or vessel pathology, and by the direct action of the organisms, or through their toxins start an inflammatory process which extends to contiguous tissues. Extensive, but somewhat distant pathological changes, as in syphilitic pigmentary degeneration, is due probably to the damaged nutrition of the retina and the choroid by primary vessel pathology.

The most common ocular manifestation of congenital lues is not disease of the fundus. Interstitial keratitis is certainly much more frequent. This disease, however, seems to be an allergic manifestation of congenital lues—judging from the vagaries connected with its onset, its course, and the responses this diseased condition shows to various non-specific forms of treatment. A similar group of ocular conditions has been mentioned in regard to tuberculosis. It is perhaps significant to this also thatluetical corneal pathology andluetical vessel pathology, both present in the same case simultaneously, are quite uncommon. This should exclude cases of peripheral atrophy of the retina and other changes consequent to the syphilitic iridocyclitis so often an accompaniment of interstitial keratitis.

The so-called salt and pepper fundus, very well named, is perhaps outstanding in the matter of incidence. It is a disease of the pigment epithelium and according to Elwyn is a common accompaniment of interstitial keratitis. Before that confirmation by Elwyn this was suspected by the author upon some clinical experience. The progress of this condition is slow, though its onset is very early in the child's life. Vision is involved, but often only to a rather slight extent. The disease can remain unchanged for many years, and antileutic treatment seems to affect it but very little.

Another form of congenitalluetical fundus disease is that of secondary orluetical pigmentary degeneration of the retina. This resembles true retinitis pigmentosa in the visual impairment, to some extent in the visual field changes present, and to a great extent in the anatomic distribution of the pathology. The appearance of the pathology, however, is quite dissimilar and should not confuse the ophthalmologist. The prognosis in this type of disease is absolutely bad. The disease changes are a manifestation of severe chorioretinitis, with involvement of the pigment epithelium, and with an obliterative arteritis of the retinal vessels and a postretinitis atrophy of the optic nerve fibers. Even if the process could be halted, early in its course, established damage would be so extensive to recipient and conductive visual elements that improvement in visual acuity would be impossible.

The rarest form of congenital lues is that of primaryluetical retinal vascular disease. This form has some relationship to that type of disease just discussed, except that pigment changes are at a minimum and the obliterative arteritis with consequent postretinitic atrophy is quite marked. In addition to the retinal vascular pathology, these cases are probably more often accompanied by other ocular signs of degeneration due to disturbed nutrition based upon this discriminative type of vessel disease. It is a very fine example of the vascular diseases so characteristic of syphilis. Luetical aortitis, meningovascular lues, this form of vascular pathology, and that about to be described, are all closely related members of the same clan.

Retinal vascular pathology of acquired lues involves both arterioles as well as the venules, perhaps pathology in the arterial system being somewhat more frequent. The condition is an inflammatory form of obliterative arteritis or phlebitis, involving both the intima and the adventitia, with round cell infiltration, destruction of the muscularis coat, and with some to extensive perivascularitis. In a case studied microscopically by Von Hippel⁵ the extensive circulation of the choroid remained normal. The postretinitic atrophy which develops in these cases seems to suggest that the disease while vascular is largely retinal in anatomic detail.

Syphilitic retinitis, or chorioretinitis or retinochoroiditis, is a diffuse disease of the fundus, and is characteristically a disease of secondary lues, at least appearing rather soon after the primary in-

fection. Roenne's¹³ analysis of fourteen of these cases following Leber's classical recapitulation of our knowledge of this disease remains as our *vade mecum*. The disease, as a recent acute condition, is now relatively uncommon but the later stages of the untreated cases are more frequently seen. The later stages of the condition have an appearance not unlike that described under congenital lues as a secondary pigmentary degeneration. A microscopic study of this disease by Rochon-Duvigneaud has been made and the pathology is largely vascular and retinal.¹⁴ The outstanding characteristics are those subjective signs of visual disturbances classical for an acute chorioretinitis, with the tragic postretinitis optic nerve atrophy which follows an unsuccessfully treated acute condition. These sequelae of the condition if first seen at the primary examination are hopeless for ocular improvement, but should be vigorously treated nevertheless, because clinical experience seems to indicate that these cases later on are potentially neuroluetics, terminating as cases of meningovascular syphilis.

Cases of intraorbital and epibulbar gummata are still not too uncommon. It is interesting, however, and the reason is not clear, but intraocular gummata are now most uncommon. The vital point is this, as every case of unilateral exophthalmos from an intraorbital space-taking lesion must have a Wassermann examination before orbitotomy—so also must every case of intraocular solid retinal detachment have serological studies before disposition is made of that case. A patient with a certain intraorbital gumma will have other general luetic complications, more important to that patient's life than the orbital condition. This is also present in the consideration of a case of intraocular gumma. That, perhaps, is the outstanding factor in these individuals.

Syphilitic optic neuritis, not considering for the moment the primary luetic atrophy of taboparesis, is an acute, intensely severe luetic condition, a manifestation of tertiary syphilis, with a sudden abrupt onset, and rather prone to recurrence when inadequately treated. The condition, when properly treated, has the best prognosis of any of the luetic intraocular conditions, excepting that of gumma.

Primary luetic optic nerve atrophy is a sign of cerebrospinal lues, in fact is diagnostic of that condition, and if untreated or treated unsuccessfully

has a tragic termination in visual impairment. There is no other luetic condition in which the demands for treatment are greater. Vigorous, intensive treatment, based upon proven and accepted physiopathological principles is absolutely necessary. Tryparsamide, however, cannot be used in any ocular condition in which optic nerve fiber damage is present at the time the antiluetic treatment is started. A sharp increase in the nerve damage, with inexorable progress in this, will almost certainly result.

The inflammatory conditions connected with a septicemia also develop because of the direct effect of organisms transmitted to the retina or the choroid by the blood stream. The ophthalmitis of infancy and early childhood, commonly known as pseudoglioma, is not rare. It results in a complete destruction of the retina and the choroid, developing into a subretinal granulomatous-like mass of cell debris which must be differentiated from a true retinoblastoma. This is not always a simple thing to do. Fortunately, an enucleation, if done for a mistaken diagnosis of true glioma, is not an unwise surgical procedure. Of outstanding importance therefore, in this condition, is that it be not mistaken for true glioma. The reason for the limitation of this disease to childhood has never been well answered. The prognosis is hopeless.

Another fundus condition, although indirectly caused, is sufficiently relevant to be included herein. This is the fundus picture of thrombosis of the cavernous sinus, a not unimportant part of a cavernous sinus symptom complex. In these days of chemotherapy the prognosis of this condition has become much more favorable. It formerly was almost certainly fatal. The fundus changes of this are the result of the peripheralward extension of the septic, inflammatory thrombotic process in the cranial vascular sinuses.

The fundus changes seen with subacute bacterial endocarditis could be due in part to some allergic-like phenomenon, the result of dead organisms in the lumen of the vessels, for frequently the retinal petechial hemorrhages seen are similar to and accompanied by a superficial skin and mucous membrane purpura. More important are those fundus changes, the result of septic emboli which have broken free from the cardiac valve vegetations. These result in foci of necrosis with not infrequently extensive inflammatory changes

in the retina, the choroid, and the optic nerve. These foci, early in their appearance, show a rather characteristic ophthalmoscopic picture. One must not forget that when these appear in the ocular fundi, then also are such septic foci present in the kidney, the spleen, and the brain. They appear late in the course of the disease, and naturally are of grave prognostic import.

Other similar changes of septicemia may appear, excluding those of bacterial endocarditis, and the pseudoglioma (a type of endophthalmitis) of infancy and childhood. These include panophthalmitis, endophthalmitis, and metastatic chorioretinitis.

Panophthalmitis is relatively rare except for those cases with initial corneal infection and a subsequent iridocyclitis, and the post-traumatic and postoperative infections with either an external route infection implantation or by a systemic infection of an operated or otherwise traumatized eye. These cases are ophthalmological problems, however, and not quite relevant to the scope of this paper. Sufficient to say, with Elwyn, "When the patient does not succumb to the septicemia, the globe gradually becomes disorganized and remains as a shrunken blind eye."

Endophthalmitis can be considered a metastatic ophthalmitis of a lesser acute severity than that of panophthalmitis. Also, it has a slightly more favorable prognosis, as well as a less severe subjective group of symptoms. This especially is true since the use of intraocular and subconjunctival injections of penicillin. Relevant here is the clinical experience which indicates a greater benefit from this local application of penicillin rather than from other more distant injections for general absorption. Another clinical point of interest in these cases is the ability to determine the source from whence the infection spread in a small number of instances. These are the cases which seem to originate in such loci as—infected external hemorrhoids, following a carbuncle high in the cervical region, and after the removal of a severely infected tooth. (The instances quoted were actual cases—one eye only saved in the three mentioned.)

Clinically and ophthalmoscopically, (excluding local subjective symptoms), the outstanding point in the diagnosis of these two conditions is the great rapidity with which the fundi become obscured by precipitates on the cornea and the lens, and the exudates in the pupillary aperture and in the

vitreous chamber. The normal red reflex from the ocular fundus will disappear, in some cases, within 48 hours. Some cases of metastatic chorioretinitis may remain limited to localized retinal abscesses in a certain sector of the fundus, but this is a rather rare situation. One such case was seen by the author in consultation, in which the first impression was that of a possible intraocular neoplasm. The marked inflammatory reaction present, and the rapidity with which this advanced were most important in arriving at the correct diagnosis.

The last of the inflammatory conditions to be mentioned in this presentation are those connected with two forms of encephalitis. The first is that of toxoplasmosis and it is not a pure infancy condition. According to Koch⁷ and his co-workers and to Lucic,¹⁰ the essential pathology is that of inflammatory necrotizing lesions in the eye, as in the brain, with subsequent extensive retinal and choroidal degeneration and with a large amount of pigment deposition. Other ocular malformations are not uncommon. As is well known, human toxoplasmosis can result in an extensive diffuse disseminated encephalomyelitis in infants, in older children as a milder infection and in adults with pulmonary complications. As Lucic said, "The large reservoir of spontaneous toxoplasmic infection in rodents and birds is the likely source of the human infection." We do not know the pathway of this infection to humans but the infantile infection is through the placenta.

The second of this last group of cases is the manifestation of the encephalitis which, fortunately, only rarely complicates vaccination. The ocular pathology is inflammatory and granulomatous in character, focal in nature, and according to Braun¹ affects the nerve fiber and ganglion cell layers of the retina. Braun assumed this to be an endogenous intraocular infection, perhaps precipitated by injury, and the complication of a mild vaccinal encephalitis.

While the etiology of sympathetic ophthalmia is still unknown, this also is an inflammatory granulomatous condition of the intraocular structures and for record alone must be included herein. The condition does not need a perforating lesion of the eyeball for its development, though that is the most common precipitating cause. Prevention of the disease is its best treatment for once it be-

(Continued on Page 818)

Missed Meckel's Diverticula

Presentation of Nine Cases

By C. E. Umphrey, M.D.

Detroit, Michigan



WE MUST BECOME Meckel's diverticulum-minded. It should be carefully sought for each time the abdomen is opened. Many times it is found at the second or third operation. Recovery following its removal, even when the diverticulum appeared innocent of acute pathologic changes, raises

the question of the necessity of the last two operations. Errors of this kind, then, can be eliminated by thoroughly examining each abdomen that is opened, not by vision alone, but also by palpation. The small intussuscepting diverticulum causing partial obstruction cannot be seen.

This anomaly was described by Lavater in 1671, Ruysch in 1707, Morgagni in 1769 and, finally and most completely, by Meckel in 1809. The communication between the embryo and the yolk sac is wide at first, but by the sixth or seventh week, it has narrowed down to a fine fibrous band which finally parts and disappears. If the vitelline or omphalomesenteric duct persists, one can expect a wide variety of malformations, varying from a small dilatation in the intestinal wall to a large sac-like formation causing intestinal obstruction without adhesions, as reported by Cabot in 1940.

Histologically, the structure is usually that of the ileum. It has the same number of muscular layers and the mucosa pattern is usually similar. Epithelial heterotopia may resemble gastric, pancreatic, duodenal or colonic mucosa. This, then, would give a structural basis for the wide variety of symptoms. The tip of the diverticulum may lie free or be attached to the umbilicus, mesentery or any portion of the gut, thus introducing such conditions as intussusception, volvulus, kinking, twisting and complete intestinal obstruction, with its concomitant symptomology.

This is aptly demonstrated by perusal of the

literature since 1940. One encounters intriguing reports, such as "Invagination of a Meckel's Diverticulum," by Hanelin;⁷ "Significance of Meckel's Diverticulum," by Stewart;¹⁵ "Surgical Emergencies During Childhood Caused by Meckel's Diverticula," by Chaffin;² "Hemorrhage from Meckel's Diverticulum," by Shapiro;¹⁴ "Meckel's Diverticulum Causing Obstruction by Tying Knot Around Adjacent Ileum," by Darling;⁵ and "Massive Hemorrhage from Meckel's Diverticulum," by Sacks.¹³ Other reports cover volvulus, foreign bodies including calculi and one diverticulum even contained a miniature stomach.

It readily becomes apparent from the above why one cannot produce a classification of symptoms that will cover all the wide variations. There are a few findings which seem to be fairly consistent. The patient usually complains of an intermittent recurrent type of colicky pain, which tends to localize under the midportion of the right rectus and about 1 cm. above the umbilicus. There is frequently bright red or tarry stools accompanied by a secondary anemia, with an upper gastrointestinal tract that is roentgenologically negative. MacCarty,⁶ Rousseau and Martin,¹¹ and Poppel¹⁰ have written articles on the value of x-ray as an aid in diagnosis. It would appear that the lateral and oblique views are of value in a small percentage of cases.

The problem, then, as we see it, resolves itself into a consideration of two types of cases. Those showing severe acute symptoms as in hemorrhage, volvulus, intussusception, gangrene, and intestinal obstruction are readily recognized as acute abdomens and, in the vast majority of cases, are well treated. The second classification demonstrating chronic, intermittent, recurrent, symptomology are, we believe, often poorly treated, and even missed while performing intra-abdominal operations.

With this thought in mind, 3,460 intra-abdominal operations performed in the Florence Crittenton Hospital in the past five years were reviewed, with Meckel's diverticulum occurring nine times. According to a large series of consecutive autopsy reports, Meckel's diverticulum occurred in 2 per cent. This, then, would indicate that out of an estimated sixty-nine diverticula, only nine were discovered. From a review of the literature, we believe this is quite the usual average. A summary of these cases follows. (See table.)

MISSED MECKEL'S DIVERTICULA—UMPHREY

SUMMARY OF CASES

Case No.	Age	Color	Sex	Diagnosis		Operation	Laboratory Reports	Tissue Diagnosis
				Preoperative	Postoperative			
3076	38	W	F	Chronic appendicitis	Chronic appendicitis Meckel's diverticulectomy	Appendectomy Diverticulectomy	2 Blood counts 2 Urinalyses 1 Serology-neg.	Inactive appendix Meckel's diverticulum
4820 B	34	W	F	Retroversion of uterus	Retroversion of uterus Meckel's Diverticulum	Baldy-Webster suspension Diverticulectomy	1 Blood count shows secondary anemia 3 Urinalyses 1 Serology-neg.	Meckel's diverticulum
2832 B	16	W	F	Recurrent appendicitis	Recurrent appendectomy Meckel's diverticulum	Appendectomy Diverticulectomy	1 Blood count 1 Urinalysis 1 Serology-neg.	Mild catarrhal appendix Meckel's Diverticulum
84799	29	W	M	Postoperative adhesions	Postoperative adhesions Meckel's diverticulum	Lysis of adhesions Diverticulectomy	1 Blood count 2 Urinalyses 1 Serology-neg.	Meckel's diverticulum
73477	23	W	F	Menorrhagia Retroversion Incomplete abortion	Menorrhagia Retroversion Meckel's diverticulum	D & C Uterine suspension Diverticulectomy	1 Blood count 2 Urinalyses 1 Serology-neg.	Degenerating decidua and placenta Meckel's diverticulum heterotopic gastric mucosa
67429	33	W	F	Acute appendicitis Acute Meckel's diverticulitis	Chronic appendicitis Acute Meckel's diverticulitis	Appendectomy Diverticulectomy	WBC 17, 850 Poly. 93 NF23 10 RBC 20 WBC Epith. cells mucous in urine not catheterized	Chronic appendicitis Acute Meckel's diverticulitis
1303	23	W	M	Subacute appendicitis	Chronic appendicitis Chronic Meckel's diverticulitis	Appendectomy Diverticulectomy	WBC 10,900 2 Urines 1 Serology-neg.	Mild obstructive appendicitis Meckel's diverticulum
3377	23	W	F	Recurrent appendicitis Cervical laceration	Chronic appendicitis Meckel's diverticulum Cystic right ovary	Appendectomy Diverticulectomy Right, partial	1 Blood count 2 Urinalyses 1 Serology	Inactive appendix Meckel's diverticulum Hemorrhagic luteal cyst
3114	27	W	F	Recurrent appendicitis	Chronic appendicitis Intussusception of Meckel's diverticulum	Appendectomy Diverticulectomy	1 Blood count WBC 10,000 2 Urinalyses 1 Serology-neg.	Pressure changes in appendix Acute Meckel's diverticulitis

* I wish to express my appreciation to the surgical staff of the Florence Crittenton Hospital for permission to review those cases not my own.

MISSED MECKEL'S DIVERTICULA—UMPHREY

From the summary it is noted that:

1. Only two males are listed. This is undoubtedly due to the fact that a large majority of the abdominal surgery performed is gynecology.

2. In only one case was a preoperative diagnosis made of "Acute Meckel's Diverticulitis," which is in keeping with other reports.

3. The most frequent preoperative diagnosis was "appendicitis."

4. The only case examined by x-ray was reported as having periceal tenderness. At operation, it proved to be an intussusception of a Meckel's diverticulum.

5. The only positive laboratory findings were in the two cases of "Acute Diverticulitis," where the white blood count was 17,850 and 10,000, respectively.

6. Three cases had had previous abdominal operations and the diverticulum had been missed.

7. Whether acute or inactive, all cases have been benefited by the surgery performed, and we feel the diverticulectomy mainly responsible.

Conclusions

1. Only 17 per cent of existing Meckel's diverticula are discovered during intra-abdominal operations.

2. Recovery occurs frequently enough following diverticulectomy, even if not acutely inflamed, to warrant its removal with very few exceptions.

3. Only ten per cent of those removed are diagnosed preoperatively.

4. The small intussusceptions cannot be seen but are readily found by passing the gut through the fingers.

5. The laboratory and x-ray offer little aid in the diagnosis.

6. In this series, 33 $\frac{1}{3}$ per cent had had previous intra-abdominal operations and the Meckel's diverticula were missed. In all three, the abdominal symptoms disappeared following diverticulectomy.

7. Diverticulum should be suspected if there is tarry or bright red bleeding per rectum and when the upper gastrointestinal tract is roentgenologically negative.

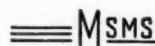
8. Intermittent colicky pain localized just above and to the right of the umbilicus is a frequent symptom.

9. Simple resection, with the clamps parallel to the long axis of the bowel and inversion of

the base transversely, is the usual procedure. Occasionally, a resection of the involved ileum is necessary with closure of the ends and side-to-side anastomosis.

References

1. Cabot, Hugh: Meckel's diverticulum with intestinal obstruction. Case report, *New England J. Med.*, 222:195-197, 1940.
2. Chaffin, L.: Surgical emergencies during childhood caused by Meckel's diverticulum. *Am. J. Surg.*, 113:45-56, 1941.
3. Clark, C. W.: Irreducible double intussusception due to Meckel's diverticulum, complicated by volvulus. *Brit. J. Surg.*, 31:301-303, 1944.
4. Conrad, H. A.: Meckel's diverticulum. Two cases. *Am. J. Surg.*, 52:267-274, 1941.
5. Darling, G. C.: Meckel's diverticulum causing obstruction by tying knot around adjacent ileum in man, seventy-four years. *Brit. J. Surg.*, 29:277, 1941.
6. Gile, J. F. and MacCarty, W. C., Jr.: Calcified concretions within Meckel's diverticulum (with fistulous connection with appendix). *Radiology*, 41:491-494, 1943.
7. Hanelin, H. A.: Meckel's diverticulum with invagination. *J. Michigan M. S.*, 39:786, 1940.
8. Mulsow, F. W.: Meckel's diverticulum containing calculi. Case. *Am. J. Digest. Dis.*, 10:188-189, 1943.
9. Noel, W. W.: Meckel's diverticulum. *Am. J. Surg.*, 49:454-463, 1940.
10. Poppel, M. H.: Meckel's diverticulum, roentgen demonstration. *Am. J. Roentgenol.*, 51:205, 206, 1944.
11. Rosseau, J. P. and Martin, A. G. M.: Meckel's diverticulum, preoperative roentgen diagnosis. *Radiology*, 40:605-607, 1943.
12. Rottiman, M. and Zetena, D. F.: Meckel's diverticulum as cause of intestinal obstruction; case of volvulus. *Am. J. Surg.*, 60:443-446, 1943.
13. Sacks, M. S.: Massive hemorrhage from Meckel's diverticulum. Two cases. *Bull. Sch. Med. Univ. Maryland*, 27:197-203, 1943.
14. Shapiro, B. and Tosti, O. G.: Hemorrhage from Meckel's diverticulum. Four cases. *Arch. Pediat.*, 59:295-302, 1942.
15. Stewart, G. A.: Significance of Meckel's diverticulum in surgical abdomen. *Rev. Gastroenterol.*, 7:310-312, 1940.
16. Waugh, T. R.: Miniature stomach in Meckel's diverticulum. *J. Tech. Methods*, 24:55-60, 1944.
17. Wilson, H.: Meckel's diverticulum, with report of twelve cases. *Am. J. Surg.*, 56:614-618, 1942.



NEW CRIPPLED CHILDREN RATES

The Legislature in 1947 amended the Crippled Children and Afflicted Adult laws giving increases in medical and hospital fees. The top limit on medical fees is raised from \$75 to \$90, a 20 per cent increase. This is still not adequate but is an improvement.

Other changes were made. Hereafter, the doctor must render his bill on forms obtainable at the hospital. These must go to the State office in Lansing and be sufficiently descriptive of the services rendered to allow the paying officers to check the amount due. Code numbers are now supplied but there is danger of mistake, so billing by name and description of service is preferred.

By law, bills rendered over sixty days after the service is concluded are void. It pays to bill every thirty days and take no chances. This is good policy in all types of practice.

MEDICAL BROADCASTS

In 1947—the centennial year of the American Medical Association—the Bureau of Health Education is adding to its electrical transcriptions for use by local radio stations a series on surgery, foods and physical medicine. Nearly 5,000 local broadcasts will be made from these transcriptions in the course of a year.

Approximately 120 radio stations of the Mutual Broadcasting System have carried the program entitled "Stephen Graham, Family Doctor," which has been produced under the supervision of the Bureau.

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Parenteral Fluid Therapy

Paul V. Woolley, M.D., Detroit, Michigan

Parenteral fluid therapy serves four elementary purposes in modern pediatrics: (1) it provides water when adequate amounts cannot be taken by mouth, (2) it adjusts and maintains electrolyte patterns disturbed during disease, (3) it allows replacement or augmentation of blood proteins and formed elements, (4) it maintains and enhances nutrition when oral feedings are not satisfactory.

Despite efforts to develop new methods for parenteral therapy, the intravenous and subcutaneous routes remain most valuable. Water is rarely considered apart from electrolytes since it parallels these so closely in all metabolic processes. The fluid or water requirements at various ages were discussed and the safe therapeutic ranges outlined.

While sodium and chloride are the most important electrolytes, the use of unbalanced solutions such as sodium bicarbonate and sodium lactate is often advisable. The intelligent use of parenteral electrolytes depends upon a thorough understanding of normal electrolyte physiology, and the brief principles underlying this are discussed.

Augmentation of blood proteins and foreign elements is obtained by the use of whole blood plasma, plasma fractions, and packed red cells. The ability to supply nutrition over extended periods of time is one of the real developments of the past two years. Proteins, carbohydrates and accessory substances are all available in forms satisfactory for parenteral administration and the use of these is discussed.

Many children are living today, who, under the

conditions existing twenty years ago, would have had a hopeless outlook. This is due largely to the pediatrician's ability to provide them with plenty of water, vitamins, food, and blood by way of their skin and veins. Even a very sick baby with severe diarrhea can be handled in this manner. The surgeon is able to perform operations previously impossible, since his small patient can be carried through the time when he is unable to eat entirely by intravenous feedings. The small child who has been burned often must be provided blood serum for weeks following his accident and now has a chance for recovery never before available. Certain infants have been fed and their weight maintained for weeks through the use of intravenous feedings and have gone on to develop into normal babies. The types of food to be used for each condition were discussed as well as the methods for providing these fluids.

The Significance of the Lowered Basal Metabolic Rate

R. M. McKean, M.D., Detroit, Michigan

With the several offerings of Fagge, Gull, Ord and Kocher in the 1870's and 1880's, the relationship between thyroid deficiency and myxedema and cretinism was established on a firm basis. Bauman, Kendall and Harington, respectively, between 1895 and 1927 noted the predominant presence of iodine in thyroid gland material, isolated the active principle—which was termed "thyroxin"—and identified this principle as an iodo protein, tetraiodotyrosine. Widespread investigations since that time have suggested a number of potential causes for a deficiency in effective thyroxin, notably (1) the lack of necessary building stones, particularly iodine and l-tyrosine; (2) the inability to synthesize properly the prod-

NOTE: Other papers presented at the Institute were published in the May and June, 1947 issues.

uct in the gland; (3) an inhibition of the mature secretion peripherally (perhaps due to an anti-hormone); and (4) the lack of a normal stimulus, notably the thyrotropic hormone of the anterior pituitary gland. These factors were given detailed discussion.

In the past quarter century, the intimate relationship of the thyroid gland to the maintenance of normal heat production has been recognized, and an increasing attention has been devoted to this point in clinical medicine. An appreciation of the importance of oxygen utilization and carbon dioxide excretion as a satisfactory means of measuring heat production in the living organism, has led to its application in the development of methods for the study of human basal metabolism in health and in various disease states.

In this discussion, we were concerned with those readings consistently on the low side of the accepted norm. These we termed the "hypo-metabolic states," and a classification was offered covering this group from clear-cut myxedema and cretinism at one end of the clinical spectrum, through varying degrees of nonmyxedematous hypothyroxinism, down to that nebulous group whose only positive finding is a persistently lowered metabolic rate. Therapeutic implications of the various members of the "family" were noted.

Treatment of Common Fractures

Homer Stryker, M.D., F.A.C.S., Kalamazoo, Michigan

In fracture work the good result is soon forgotten by the patient and his friends; the poor result is a walking advertisement, an ever-present reminder of your handiwork, which puts you permanently on the "who done it" list of all the patient's friends.

A good result in many fractures is impossible regardless of the skill of management; but by carefully following the fundamental principles of fracture treatment, by mastering the technique of several methods of reduction, by proper selection of the method after a careful analysis of the patient and his injury, and by eternal and constant vigilance, the poor results can be held to a minimum.

The fundamental principles of fracture treatment are:

1. Reduce the fracture as nearly anatomically as is possible without violence.

2. Hold the fragments continuously reduced without a moment's interruption until healed.
3. Mobilize and exercise all joints not requiring immobilization for the maintenance of the reduction.
4. Continue your counsel and treatment until the patient is physically, mentally, and psychologically completely rehabilitated.

What should be the standard of reduction?

1. Perfect alignment with no angulation.
2. Minimum of rotation.
3. Maintain length to within one-half inch if the fracture is in a lower extremity.
4. No distraction.

What are the methods of reduction?

1. Manipulation and plaster fixation.
2. Traction and countertraction.
3. Open reduction, with or without internal fixation.

Slides of patients were shown to emphasize the value of adhering to these principles, to point out some of the more common violations and their dangers, and to suggest some points which may help solve some of the problems in the treatment of these fractures. Cases illustrated were fractures of the wrist, forearm, elbow, ankle, knee, and hip.

Antihistamine Substances

Stanley W. Insley, M.D., Detroit, Michigan

The use of antihistaminic substances in the treatment of various allergic conditions is predicated on the theory that a release of free histamine, during an allergic contact, has a role in the production of many of the allergic symptoms.

This concept of histamine release during an allergic or anaphylactic syndrome was first brought out as far back as 1911 by Dale and Laidlow. A number of investigators, chiefly Lewis, have since confirmed and enlarged upon this idea, and the way was thus paved to a search for new drugs and chemicals which might safely neutralize the excess histamine-like substances noted during allergic reactions, and bring at least some of the distressing symptoms under control.

The antihistamine substances of which we shall speak, do *not* apparently have any effect on the specific protein-antibody reaction. These substances also do *not* neutralize some of the other by-products of an allergic reaction, such as hepa-

rin. The antihistaminics really belong to the category of alleviating drugs and do not obviate the need for complete studies and adequate management of the allergically sick individual.

The two most widely used American drugs of this antihistaminic type are benadryl and pyribenzamine. There are clinical studies also being made in this country on two new French drugs of this type, namely, antergan and neo-antergan.

The range in dosage of the above drugs for various allergic manifestations and age groups was discussed. The efficacy in various disorders and possible side effects were also pointed out.

The Newer Methods in the Treatment of Anemias

Cyrus C. Sturgis, M.D., Ann Arbor, Michigan

Anemia is a commonly encountered condition in the United States as indicated by its presence in 12.5 per cent of all patients admitted to the University Hospital in Ann Arbor. Fortunately a great many types of anemia are amenable to treatment with iron, liver, folic acid and other anti-anemia substances. A patient who suspects the presence of anemia should first, by all means, have a thorough examination by a physician in order to determine its type and the best method of treatment. Self-medication is improper because patients often take expensive antianemia substances when they do not have an anemia or they may take the wrong type of medication and fail to take the kind that acts specifically. Folic acid is the most recently introduced drug in the treatment of anemia and is one of great promise. It is helpful in only certain types of anemia, such as pernicious anemia, and careful observations over a long period of time are necessary before the actual efficacy of the preparation can be definitely established.

Atypical Pneumonia

Bert M. Bullington, M.D., Saginaw, Michigan

The disease syndrome of atypical pneumonia has occurred so frequently in the past several years that the clinical manifestations have become known and usually recognized. The etiology has not been established, but there is increasing evidence that a substantial proportion of the cases are caused by a specific virus or viruses.

The illness is characterized by an insidious onset, malaise, headache, chest pains, fever and a paroxysmal harassing cough that is either non-productive or productive of only small amounts of sputum. The sputum, when present, is usually mucoid and contains only insignificant numbers of bacteria. The white blood count is not characteristic. X-ray findings are out of proportion to the severity of the illness and the physical findings. The x-ray appearance varies, and it is doubtful if the diagnosis can be made by x-ray alone.

Cold agglutination of erythrocytes by the patient's serum develops in the majority of patients. Although this test is neither entirely specific nor absolutely diagnostic, it is a valuable test.

The pathological findings consist of an inflammation along the entire respiratory tract with congestion and infiltration of the alveolar walls with monocytes, lymphocytes and occasional neutrophils; a similar reaction is present in the peribronchial and perivascular tissues. Small areas of atelectasis are seen. Similar lesions are seen in other interstitial pneumonias of known etiology.

Complications, although infrequent, do occur and consist of recurrences, pseudobronchiectasis, bronchiectasis, and rarely ulceration of the tracheobronchial tree, pleural effusion, and others.

Treatment is symptomatic, with specific therapy being used for the complications.

"Strep" Throat

O. B. McGillicuddy, M.D., Lansing, Michigan

An epidemic of severe streptococcus throat infections on an army air field in 1945 was studied in the Ear, Nose and Throat Department. The infection was not influenced by sulfa compounds but was readily cured by penicillin.

There were hundreds of soldiers who, although they were not ill, had throat cultures positive for streptococcus. These men were examined with mirror and nasopharyngoscope. The latter is a slender tube with a small light at the tip which enables the examiner to see the nasopharynx, that part of the throat located back of the nose and above the palate.

Seventy-eight per cent of these men with positive throat cultures had a large inflamed adenoid mass, while the lower part of the throat showed no inflammation. When the throat cultures be-

came negative, the swelling and redness of the adenoid mass usually subsided.

Controls were examined, men with negative cultures, and in one group exposed to the epidemic only 44 per cent showed a large amount of adenoid tissue. In another group not so exposed the percentage was only 32.

The study seemed to point to the adenoid tissue as an important source and reservoir of infection in this epidemic and probably in all "strep" throats. The amount of adenoid tissue should be determined in all patients, child and adult, who are having recurrent sore throats or obstruction of the tubes leading from throat to ears. If the adenoid tissue is extensive it should be removed or treated by x-ray or radium.

Evaluation of the Serological Test for Syphilis

Arthur C. Curtis, B.S., M.D., Ann Arbor, Michigan

The diagnosis of asymptomatic or latent syphilis is at times most difficult because the only positive factor in the whole realm of laboratory aids is a blood test which in itself is not specific.

The realization that other diseases may produce positive blood tests may prevent one from making a hasty and inaccurate diagnosis of syphilis in one who has a positive test from some other disease.

The introduction of quantitative serological tests have been of great help in evaluating some of these problems. In many false positive blood tests the titre is low and may be evanescent, or changes in its titre may be rapid. In syphilis the titre has a tendency to be higher and more constant when followed for several weeks or months.

The use of both a complement fixation, and a precipitation test in such patients, as well as a detailed history, complete physical examination and a lumbar puncture are necessary in most cases to be sure of the diagnosis. Even after all these studies have been made, the problem cannot be answered, and sometimes one must observe the patient for several weeks or months before a final opinion can be substantiated.

The Treatment of Burns

C. N. Weller, M.D., Detroit, Michigan

Burn therapy may be discussed under the following main headings: treatment of shock; local

therapy; management of metabolic and nutritional problems; late care.

The first objective in the therapy of burn shock is the relief of pain, best accomplished by the administration of morphine to the adult and codeine to the child. The intravenous administration of plasma, electrolyte solutions and whole blood transfusions provide the basis for re-establishing fluid balance, and act as replacement agents for the serum exuded from the burned areas. When tolerated by the patient, a mixture of sodium chloride and sodium bicarbonate solutions given orally has proved of value in restoring electrolytic balance. Early anemia is combated by giving transfusions of whole blood. Adequate fluid intake and excretion (as urine) must be maintained. Oxygen is administered if anoxemia is present. The sulphonamide drugs and penicillin have proved of value in combating the infection accompanying deep second and third degree burns.

The pressure dressing applied over vaseline or carbowax is at present a standard method of local therapy and widely used. A protein eschar technique, which is simple in application and non-toxic, has been used with good results by the writer. With this method, second degree burns heal rapidly with minimal infection, while third degree burns are prepared for grafting in a relatively short time.

Throughout the entire course of treatment, careful consideration must be given to the metabolic and nutritional problems accompanying severe burns. The patient's caloric, protein, and vitamin requirements must be supplied. It is desirable that a diet containing 20 per cent of protein, and constituting 1.5 times the basal requirements, be given. If this is tolerated, the adult patient's daily diet is increased in a few days to 3,000 to 4,000 calories. These measures aid in the prevention of a severe hypoproteinemia and a serious nitrogen deficit. Adequate amounts of vitamins A, C, D, and B Complex are routinely given.

The late care of the severely burned patient involves a continuation of the general measures aimed to prevent serious complications. Whole blood transfusions may be necessary to combat secondary anemia. The intravenous administration of blood plasma, albumin, and amino acid preparations may be required to combat hypoproteinemia. Early skin grafting of extensive areas of third degree involvement prevents further loss of fluid, and minimizes the development of scar-

ring. The burned surfaces may be prepared for grafting by the surgical excision of sloughing tissue when adherent, and by wet compresses of saline or Dakin's solutions. Split thickness grafts give, as a rule, the most satisfactory results. In case of burns about joints, the optimum functional position must be maintained during the healing period to aid in preventing deforming contractions. Physiotherapy and plastic surgery may be necessary later if deformities or disfigurement develops.

Sterility in the Female

Norman F. Miller, M.D., Ann Arbor, Michigan

Sterility is an important problem and requires a comprehensive and methodical study. The husband may be responsible for a nonfertile union but as a rule it is not difficult to evaluate the part he may play in this respect. Uncovering the cause of infertility in the woman may be a difficult matter and for this reason it is well to approach the problem in a logical way, so that step by step, the various things which might contribute are thoroughly checked and eliminated.

The simpler studies are carried out first except in those patients where there is abundant reason to believe that nonpatency of the tubes is the primary cause for the patient's failure to conceive.

The customary procedures carried out at the University of Michigan Hospital for patients presenting this problem were covered in this presentation.

Intestinal Obstruction

Charles G. Johnston, M.D., Wayne University College of Medicine and the Detroit Receiving Hospital, Detroit, Michigan

The over-all mortality has been reduced in the past fifteen years. The causes of the reduction in mortality are (1) a better understanding of the control of dehydration and mineral loss, (2) the recognition of distention as the initiating factor for lethal sequelae, and (3) to a lesser extent, the use of antibiotic agents.

Obstruction is frequently only a serious complication of other conditions. It is usually so typical in its symptomatology that regardless of etiology the diagnosis is not difficult. Successful therapy must consider not only restoration of marked physi-

ological relationships, but likewise the correction of the etiological factors.

Early diagnosis is important as it permits therapy before the harmful sequelae of distention are present, as well as early correction of the etiological agent.

The Clinical Diagnosis of the Cardiac Arrhythmias

Carl B. Beeman, M.D., Grand Rapids, Michigan

When a doctor first sees a patient with a cardiac arrhythmia, which means a condition in which the heart is beating too fast or too slowly or irregularly, he may often make a diagnosis at once without the aid of special equipment. By questioning the patient carefully, and by careful observation of the pulse, heart beat, and certain other factors, he may reach a reasonably accurate diagnosis, and hence be able to initiate any necessary treatment promptly. When they develop suddenly, these conditions may alarm both patient and doctor. They constitute some of the more dramatic acute medical emergencies. The chief characteristics of the common arrhythmias, which may be found by relatively simple bedside examinations, were reviewed.

Pain of Spinal Origin

Carl E. Badgley, M.D., Ann Arbor, Michigan

Pain of spinal origin may present a characteristic pattern and pathway of radiation which may frequently be utilized as a localizing sign to determine the site and nature of the underlying pathologic condition. It must be recalled, however, that pain is a cerebral perception and may be produced by an irritative phenomenon occurring anywhere in the central nervous system, even to the terminal sensory fibers, peripheral to the cerebral cortex without cerebral consciousness of the site of the pathologic condition, but with only a sense of localization of the pain pattern.

Pain in the arm, of a definite pattern, so-called brachialgia, may be produced not only by direct nerve root irritation of spinal origin, but by many varied types of lesions located sometimes even quite remote primarily from the central nervous system, but capable of producing a similar pattern of pain.

As much diagnostic acumen is required for

the differential diagnosis of the cause of pain in an extremity, as is necessary to differentiate accurately the cause of abdominal pain.

Various etiological factors found responsible for brachialgia were presented in this paper in clinical case review to demonstrate the variety of lesions which can produce this syndrome. Similarly, low back pain with radiation into the leg may be produced by a variety of lesions.

The author attempted to show that by a return to the teachings of Sherrington for the explanation of pain radiation, with the added clinical research evidence of pain perception throughout the involved nerve root field produced by peripheral tissue stimulation, one can understand that the pain pattern is not diagnostic but may be produced by a variety of lesions in or outside of the central nervous system, therefore, any localized pain requires diagnostic ability to determine its cause, for the source may be in any other part of the body and may be transmitted to the brain.

Respiratory Infections in Infants

Moses Cooperstock, M.D., Marquette, Michigan

A major share of illness in infants is made up of respiratory infections which tend to assume distinctive clinical patterns not observed in older age periods. The common cold, peculiarly absent during the first several months of life, is thereafter prominent in infancy, and its importance is derived from its frequent role as a precursor of more serious complicating infections due to invading pathogenic organisms, chiefly hemolytic streptococci, pneumococci and *H. influenzae* bacilli. During this period one is likely to observe frequently obstructive inflammatory infections of the respiratory tract, of which acute laryngotracheobronchitis and bronchiolitis are outstanding examples.

Pneumonia, both of the disseminated and lobar varieties, occur with great frequency. While pneumococci are common causative agents, other organisms, particularly hemolytic streptococci, staphylococci and *H. influenzae* type B, may play dominant roles and with greater frequency than at other age levels. Primary, atypical pneumonia likewise occurs commonly although in less clear-cut fashion than in older children.

Pulmonary infections seen characteristically during the early years are those that follow acciden-

tal aspiration of foreign agents of metallic, vegetal and chemical character. Limited to this period are various forms of pulmonary infection which comprise an important feature in the recently recognized clinical entity, fibrocystic disease of the pancreas.

The introduction of sulfonamides and penicillin in the treatment of the variety of infections of the respiratory tract in infants has served to reduce mortality to a great extent and also is responsible for the considerable reduction in the complications of these infections. The ideal and intelligent employment of these agents depends in a great measure on good bacteriologic control.

Abdominal Surgery in Infancy and Childhood

Clifford D. Benson, M.D., Detroit, Michigan

During the past decade, notable advances have been made in the management of surgical lesions of the abdomen in infants and children. Congenital anomalies or conditions of the abdomen making their presence known soon after birth were formerly considered to be almost hopeless because the surgical procedures involved were so formidable that very few infants could survive. The best example of this is pyloric stenosis or an obstruction of the outlet of the stomach which usually makes its presence known by the fact that these infants at the age of two or three weeks begin to vomit their feeding in spite of the fact that the formula is changed to a thicker feeding. The vomiting many times becomes projectile with rapid loss of weight over a short period of time. Since 1912, when a less formidable surgical procedure was devised, the operative mortality associated with this lesion has been reduced from well over 50 per cent to between 1 and 2 per cent. At the present time, the benefits derived from this surgical procedure are associated with permanent cure of the lesion. Obstruction of the small and large bowel in young infants, is also now amenable to surgical correction with a lower mortality rate where formerly they were almost hopeless.

The older child with such conditions as appendicitis, various types of peritonitis, conditions of the bowel requiring removal of a segment of diseased bowel, various diseases of the liver and bile ducts, and the correction of various types of hernia (or rupture) can now be cared for surgi-

cally with a minimum surgical mortality and morbidity rate. This has been possible because of outstanding advances in our knowledge of chemistry, improved surgical techniques, better diagnostic facilities and the application of the well-known drugs such as the sulfa group and penicillin. When these drugs are used in conjunction with the application of sound surgical principles, the mortality of many serious conditions in the abdomen of infants and children now requiring surgery offers not only a good prognosis but there has been a distinct and very apparent reduction in not only the incidence of complications due to infection but in the lessening of their seriousness and danger to life.

Ocular Emergencies in General Practice

F. Bruce Fralick, M.D., Ann Arbor, Michigan

Ocular emergencies constitute a very small part of the multitude of conditions those in the general practice of medicine are called upon to treat. Because of their relative infrequency, however, the physician is often at a loss as to proper approach to their management. This feeling of hesitancy is heightened by the realization that improper care may cost the patient his eyesight. It is not always possible nor always necessary to refer these patients to those especially interested in eye care, since most emergency eye conditions can and should be treated by those who first see the patient. Delay engendered by sending the patient some distance to a specialist may in itself result in a poor outcome. With such thoughts in mind, this discussion covered the emergency eye care of the common conditions seen in the general practice of medicine. Emphasis was placed upon the common mistakes made, the discussion being pointed towards a better understanding of the anatomy and physiologic functions of the eye and adnexa and the proper restoration of these anatomical and physiologic relaxations.

Preoperative and Postoperative Care

H. K. Ransom, M.D., Ann Arbor, Michigan

The risk of all operations has materially decreased during recent years and many new operations are now possible, due in large part to improvement in the methods of preparing the patient for operation and of caring for him afterwards.

While the sulfa drugs, penicillin and streptomycin have received much public attention and are exceedingly important, methods for controlling many of the serious complications have not been as widely publicized. Some of these are methods for the prevention of embolism (blood clot) in the lungs, maintenance of a proper fluid intake for patients who cannot drink, and administration by vein of all the essential food elements to those who cannot eat. Changes in abdominal wounds and the materials used in their closure have permitted early rising, which is popular with patients and shortens the number of hospital days.

Early Ambulation After Operation

D. J. Leithauser, M.D., Detroit, Michigan

The rationale of early ambulation after surgery was presented from the standpoint of basic physiologic principles. Evidence was produced to show that noxious reflexes from trauma, fear, and pain induce pathologic function of vital organs which, if unduly prolonged, may result in complications. The noxious reflexes which are indirectly responsible for postoperative complications are: those to the peripheral vascular system, those to the intestinal musculature, and those to the organs of respiration, chiefly the diaphragm. The complications incident to the pathologic function induced by these reflexes are chiefly thrombosis, intestinal distention, and atelectasis.

Details of a regimen that has been used successfully to counteract the pathologic function resulting from an abdominal operation were described. The most important feature of this regimen is exercise, particularly ambulation, and the optimal time for its inauguration, if postoperative thrombosis, abdominal distention, and atelectasis are to be prevented, is immediately after operation. In addition, specific exercises reduce morbidity and materially shorten the period of convalescence.

The results of this type of treatment in a series of over 2,000 abdominal operations were reviewed. The discussion of physiology was illustrated by graphs and animated diagrams in a motion picture which also depicted method of management and rapid recovery in actual clinical cases.

During recent years, surgeons have learned that it is much safer for patients to get out of bed and engage in some activity, particularly walking, after an operation. In earlier times, it was often

thought that complications arose because the patient got out of bed too soon. Now it is known that the exact opposite is true, and that complications are more likely to occur when the patient is kept in bed for a prolonged period. Moderate exercise stimulates breathing and circulation and digestive function, and helps to prevent pneumonia, formation of blood clots, and paralysis of the intestines that sometimes develop after an operation. Besides preventing these serious complications, moderate activity initiated immediately after operation prevents weakness and enables the patient to recover much more promptly than was formerly the case. Early recovery means early return to work and thus saves both time and money.

Use of X-rays in Obstetrics

E. Walter Hall, M.D., Detroit, Michigan

The use of roentgen rays in obstetrics is definitely and properly on the increase. Failure to employ this aid to management of childbirth is largely due to lack of appreciation of the assistance that may be had from properly evaluated roentgen findings.

Information as to the condition of the pregnant uterus and its contents is often of life-saving value. Information as to the size and shape of the maternal pelvis and the fetal pelvic relationship prepares the physician for eventualities of labor enabling him to make more logical decisions as to the best procedure for the safety of mother and child.

Limitations of pelvioradiography especially in regard to dangers of diagnostic x-rays have been greatly overemphasized in medical literature, to the confusion of laymen as well as medical practitioners. The importance of experience and judgment in evaluating roentgen findings is paramount. Close teamwork between the radiologist and obstetrician is essential for good results.

Roentgen pelvimetry is rapidly taking its place in modern obstetrics along with routine pelvic measurements by physical examination. Various methods of pelvimetry should be evaluated in regard to their practical value rather than as to cost or convenience of the radiologist.

An effort to appraise various methods of pelvimetry was made.

Improvements in x-ray apparatus and technique have made possible employment of x-rays for diag-

nostic purposes without risk of harming mother or child.

Properly made x-ray examinations properly interpreted are of great value in preventing unexpected occurrences during childbirth. The information gained is often of life-saving value and may frequently save unnecessary suffering of prolonged labor.

Neonatal Care

James L. Wilson, M.D., Ann Arbor, Michigan

The care of the newborn infant in its first two weeks of life is a large field in itself, a field which has been generally neglected. Our knowledge of the physiology of this period of life is far more limited than that at any other age and we are only now beginning to realize how completely different as a physiological mechanism the newborn animal is in almost every respect.

Practical care of the baby demands a knowledge of what is normal during this period, a knowledge difficult to acquire. At this period, symptoms which are pathological at any other time are, within certain limits, normal and the symptoms that appear are more apt to be nonspecific in their significance. One has only to think of the fact that a bleeding tendency of a slight extent is usual, that jaundice is normal, that some vomiting is normal, that irregular respirations are normal, that a certain amount of blood in the spinal fluid is seen in a high percentage of instances, that the blood sugar may be far lower than at any other age without being of significance, that moderate cyanosis is so common as to be considered often almost normal. When faced with the possibility of a pathologic condition, therefore, one has to evaluate the extent and degree of these symptoms rather than simply to determine their presence.

Only a few of the common mistakes made in caring for newborn infants can be emphasized. Attempts to prevent the initial loss of weight are often so vigorously practiced that opportunities for breast feeding may be lost. One should realize that a certain loss of weight is inevitable and normal. Fever with moderate dehydration is a common circumstance in a newborn baby. This can usually be prevented by better feeding techniques without the use of parenteral fluids which are resorted to altogether too readily.

In the present great preoccupation of the medical profession with so-called erythroblastosis, hemorrhage is apt to be forgotten. Hemorrhagic disease of the newborn is still a serious problem. Since this can be specifically treated by transfusions, one should always keep in mind that even a baby with erythroblastosis can be also suffering from hemorrhagic diseases of the newborn and that the etiology of the two conditions may be quite interdependent even though different. With a poorly functioning liver, which may often be encountered, the administration of adult blood, with its thrombin content, may frequently be necessary. Intracranial hemorrhage, when it occurs during this disease, is mostly irreversible in its effects, even though one can take a far calmer attitude towards bleeding at any other point.

New knowledge of the effect of the rhesus factor in disease has added a great deal to our knowledge, but also to our confusion. There has been a great tendency to oversimplify and overdogmatize what we now know about this disease. Babies are delivered deliberately prematurely and are transfused unnecessarily. This disease affects not only the blood but the liver, the bone marrow, and the brain of a baby. Transfusion is not a completely successful treatment in all instances, nor always logical. On the other hand, we must realize that before we knew anything about this condition, babies did survive with no treatment, or survived with transfusions not only from rhesus-negative but rhesus-positive individuals.

Convulsions during the newborn period are very frequent. Sometimes they are due to tetany, but this easily treatable condition is a rare cause. We are inclined too much, probably because of wishful thinking, to inject calcium into every baby that has a convulsion or spasm.

At present, the greatest problem that we face in the newborn period is nursery-acquired infection. Nursery infections are becoming widespread and almost endemic, even though not in the severe form as they were first described as epidemic diarrhea of the newborn. Although at present we have no clear-cut form of therapy and no sure way to prevent this disease, the medical profession must critically examine the conditions under which newborn babies are kept. They should do everything they can to improve the construction and organization of nurseries for newborn infants.

Rheumatic Fever

Herman H. Riecker, M.D., Ann Arbor, Michigan

In this discussion, emphasis was again placed upon three points regarding rheumatic fever: the essential diagnostic criteria, the avoidance of false diagnoses, and the insidious onset of the disease in many cases.

The diagnostic points consist of mitral stenosis, fibroid nodules in association with fever, malaise and anemia, migrating joint symptoms with the above, and frequently an elevated sedimentation rate. The dramatic response to salicylates is a helpful confirmatory procedure.

The minor symptoms may be of importance when occurring in certain combinations, including epistaxis, fatigue, anemia, failure to gain weight, a positive family history, low-grade fever, rapid pulse, and a history of recent respiratory tract infection.

Involvement of the heart, from the standpoint of microscopic pathology, occurs in every case and can be detected in about 80 per cent during the first attack.

There is no difficulty in diagnosis in the acute, fulminating attack, but unless mitral stenosis is present, the insidious case often presents serious diagnostic difficulties. Here the differential diagnosis includes cardiovascular asthenia, congenital heart lesion, brucellosis, and various focal infections, such as pyelitis, sinus and tonsillar disease, as well as tuberculosis and lymphoblastoma.

The diagnosis of rheumatic fever should not be made unless an unequivocal basis of evidence is present.

All structures and tissues of the heart may be involved, and in 10 per cent of children, the carditis is the only clinical manifestation and may progress in the first decade of life by a single attack to fatal termination. Carditis is reported to be present in 100 per cent of cases occurring during this period of life.

Pericarditis is the most commonly overlooked manifestation of cardiac involvement, and its detection by physical signs should be kept in mind as possibly the first evidence of activity in both latent cases and the initial attack.

Sulfonamides continue to be our best prophylactic measure for the prevention of recurrences, and small doses suffice to render most streptococcal strains nonpathogenic.

After many years of favorable clinical experi-

ence in the use of large doses of salicylates, it has now been shown in the laboratory that the salicylates do have a *specific action* in rheumatic fever. The drug should be administered by mouth, or by enema (not intravenously) in liberal dosage to all active cases.

While at present less than half the population of the state is being served, extensive expansion of case finding and proper care of all cases of rheumatic fever in Michigan is foreseen in the near future.

The service, while making severe demands upon physicians interested in the disease, is being adequately financed from the standpoint of the child by the Michigan Crippled Children Commission and the Michigan Society for Crippled Children and Disabled Adults, Inc.

Infestation With *Sarcoptes Scabiei* var. *Hominis*

Eugene A. Hand, M.D., Saginaw, Michigan

Military and civilian physicians were apprehensive during the recent great conflict that the return of our world-traveled veterans to civilian life would be followed by an increase of the tropical and other contagious diseases heretofore rare in the states. Recently the Surgeon General stated that due to counter measures and also good fortune this was untrue.

This is true for malaria, filariasis, yellow fever, cholera, intestinal parasites, and many others. As after all wars and social upheavals, there has been an increase in venereal disease, fungous infections, and especially scabies.

Scabies, the itch, or seven year itch, has long been common. The marked increase of scabies in the military and civilian population during and particularly after this war was observed by physicians in all parts of this and foreign countries. Infestations in individuals, families, and communities have been traced to furloughed and demobilized veterans.

The speaker's interest in scabies was whetted while on duty as a liaison officer with the Australian army in Perth, Western Australia. The unfortunate use of bichromate as a dye for khaki uniforms and blankets of this superb ally led to many cases of khaki or chrome dermatitis. During the early stages of this condition, the presence of general pruritis aggravated at night, the same as with scabies, made the differential diagnosis difficult.

The treatment of these conditions is diagrammatically different. The complications of dermatitis, pyodermas, and eczematization, often chronic in type, seen from treatment of scabies with sulphur and other of the antiscabetic specifics, were even more common and distressing when used by error on skin irritated by bichromate dye. It was imperative to find an easy method of finding the scabetic organism to make an accurate diagnosis, to avoid this error.

Bonomo, of Leghorn, Italy, in 1687, described the *Sarcoptes scabiei* var. *hominis* after teasing the female adult out of a scabetic burrow or vesicle on the point of a needle or pin. This has been the classic method of demonstrating the scabies insect and is so described in most textbooks on dermatology.

This method has been likened to the difficulty of finding the pot of gold at the end of the rainbow. In the speaker's hands as well as others this has been difficult, time consuming, and impractical. A method of scraping or slicing a burrow, vesicle, or other scabetic lesion with a razor, then treating this with 10 per cent KOH before microscopic search, was devised and found most helpful. This method, which has been used by others, was described.

The symptoms, diagnosis, course, complications, and treatment of scabies were discussed. Special attention was given to the use of benzyl benzoate and other of the newer antiscabetic substances. The importance of inspecting and treating familial and other contacts to avoid reinfestations was stressed.

Lantern slides and a movie picture of the live scabies insect showing stages in the life cycle were shown.

Peritoneoscopic Studies in Epidemic Jaundice

Thomas N. Horan, M.D., Detroit, Michigan

This presentation is a description of the gross and microscopic changes in the liver in the course of jaundice. Specimens of the liver are taken by biopsy from the first days of the illness (before the jaundice has appeared) through the stage of jaundice, and into the recovery phase for as long as one or two years after the beginning of the illness. The specimens are minute but entirely adequate for microscopic study. The examination is done using local anesthesia.

A direct study of a major organ done in this

way expresses clearly the extent and nature of the damage sustained by the liver. It shows the mode and celerity of the repair process. It establishes the normal healing time, and gauges convalescence in the more protracted cases. The degree of accuracy of various liver tests can be judged; when these tests are compared, case by case, with actual changes in the liver.

Cancer of the Uterus

A. E. Catherwood, M.D., Detroit, Michigan

Cancer of the uterus assumes an important role in the life of the American family and in the interest of the medical profession.

The education of the laity to a full realization of the significance of early diagnosis and treatment, and necessity for periodic examinations, are part of the duties of the profession.

A careful pelvic examination, including a digital and speculum visualization of the cervix, is a necessity for the woman who comes for periodic check-up, in cancer detection.

Diagnosis is made by microscopic examination of tissue removed by biopsy from the site of the lesion.

At the present time, full and complete co-operation between the gynecologist, radiologist and the pathologist offers the best method of treatment for all types of cancer of the uterus, with each patient presenting her particular problem of management, if maximum benefits are to be achieved.

The treatment decided upon may be radium application, super-voltage roentgen ray therapy, surgical removal, or a combination of these procedures, depending upon the site of the lesion and the stage of the disease.

Continued follow-up observations, over a period of years, are essential if we are to benefit by experience and evolve new techniques in the management of this important disease.

DOCTORS IN GREAT BRITAIN

The 1947 edition of the *Medical Register* has recently been published (22s., post free). Particulars given in tabular form reveal that on Dec. 31, 1946, there were 76,292 names on the *Register*—nearly half as many again as in 1927, when there were 53,591. In 1946 2,237 names were added and 1,092 removed for various reasons—*British M. J.*, July 5, 1947.

ON THE RUN . . .

Treatment of patients is essentially an effort to improve their internal stability and external adaptability.

Honesty and frankness appear to rank first with patients; good medical service, sympathy, kindness and friendliness are of secondary importance.

Five per cent of patients with rheumatic heart disease and 8 per cent with congenital heart lesions develop bacterial endocarditis.

Lymphosarcoma of the small bowel is usually diffusely infiltrating and not limited to a small area of the intestine so that the mass is frequently palpated.

—Selected by W. S. REVENO

THE FUNDUS OCULI IN DIAGNOSIS AND PROGNOSIS

(Continued from Page 804)

comes established, the condition is practically hopeless. The diagnosis should be made from the pathologic changes in the anterior segment of the eyeball (the initially injured or its mate) before the fundus pathology has appeared, that is, a terminal phase of the disease.

Conclusions

In this presentation an attempt has been made to invade the field of internist, especially to call attention to the fact that the ophthalmologists have, with him, a most decided interest in certain medical problems. Perhaps he can be of some assistance.

Bibliography

1. Braun, R.: *Deutsche med. Wchnschr.*, 66:527-529, (May 10) 1940.
2. Coats, G.: *Roy. Lond. Ophth. Hosp. Rep.*, 17:440, 1907-1908.
3. Eales, H.: *Ophthal. Rev.*, 1:41, 1882.
4. Elwyn, H.: *Diseases of the Retina*. Philadelphia: The Blakiston Company, 1946.
5. Von Hippel, E.: *Arch. f. Ophth.*, 117:221, 1926.
6. Igersheimer, J.: *Syphilis und Auge*. 2nd Ed. Berlin: Julius Springer, 1928.
7. Koch, Wolf, Cowan, and Page: *Arch. Ophthal.*, 26:565-584, (Oct.) 1941.
8. Leber, T.: *Die Krankheiten der Netzhaut*. In *The Graefes-Saemisch Handbuch der gesamten Augenheilkunde*. 2nd Ed. Leipzig: W. Englemann, 1916.
9. Lillie, W. I.: *Cardio Vascular Renal Disease*. New York and London: D. Appleton Century Co., 1940 (Smith, Weiss, Lillie, Konzelmann Gault.)
10. Lucic, H.: *Ophthalmology in the War Years*, Vol. 1. Weiner, p. 851. Chicago: Year Book Publishers, 1946.
11. Muncaster, S. B. and Allen, H. E.: *Arch. Ophthal.*, 21:509, 1939.
12. Nettleship, E.: *Roy. Lond. Ophth. Hosp. Rep.*, 11:1, 1887.
13. Roenne, H.: *Acta Ophth.*, 12:1, 1934.
14. Rochon-Duvigneaud, A.: *Arch. d'Ophth.*, 26:175, 1906.
15. Schmidt, R.: *Arch. f. Ophth.*, 142:1-15, 1940.
16. Schultz, J. F.: *Texas State J. Med.*, 35:705-708, (Feb.) 1940.
17. Spaeth, E. B., and de Long, P.: *Tr. Am. Acad. Ophth.*, 45:227, (July-August) 1941.
18. Tassman, I.: *The Manifestations of Internal Diseases*, 2nd ed. St. Louis: C. V. Mosby Co., 1946.
19. Woods, A.: *Arch. Ophth.*, 18:510, 526, 1937; and *Am. J. Ophth.*, 21:366-383, 1938.

Editorial

EIGHTY-SECOND ANNUAL SESSION

THE EIGHTY-SECOND Annual Session of the Michigan State Medical Society will be held in Grand Rapids, September 23-26, 1947. Again we visit the ideal convention city, where all activities may be held practically under one roof. It is a pleasure to meet in Grand Rapids, with its Civic Auditorium attached by subway to the headquarters hotel, The Pantlind. The Furniture City offers plenty of space. The halls need not be crowded, the exhibits will have room, and the meetings will be conveniently housed.

The official call and the complete program will be presented in the August JOURNAL, but it is time our members who wish to attend begin making reservations. The scientific and technical exhibits have all been procured, and a topnotch scientific program featuring twenty-eight out-of-Michigan speakers has been arranged. Sunday and Monday, September 21-22, will be devoted to House of Delegates' meetings; the final meeting of the House of Delegates will be held Tuesday forenoon.

The Scientific Program will run from Tuesday noon to Friday noon, with twelve Section Meetings being held during the forenoon hours. Seven General Assemblies, and twenty-three Discussion Conferences will utilize all time on Tuesday, Wednesday, Thursday and Friday morning.

Alumni and fraternity dinners will be held Tuesday evening. Officers' Night will be Wednesday, and State Society Night will be Thursday.

This is a well-filled and rather ambitious program which will surpass anything we have ever held. Michigan is becoming an outstanding state, as far as medical affairs are concerned, and this year will add to our stature.

You must not miss this great incoming of medical men with their wares and their accomplishments and their ambitions.

WAGNER-MURRAY-DINGELL

PRESIDENT TRUMAN has again proposed a National Health Insurance program, and urged the Congress at least to make a start at this session. In 1945 when the President sent his mes-

sage to Congress for COMPULSORY HEALTH INSURANCE, he had the stage all set; simultaneously Senators Wagner and Murray and Congressman Dingell offered another version of their bill.

The strategy used in 1945, when the President urged socialized medicine, was worked again, and on May 20, 1947, bills were introduced by Wagner, Murray, and Dingell, S-1320 and H.R.-3548. The latest bills have been entirely rewritten, and we shall present a digest as soon as possible. They provide personal health services to eligible individuals, medical services, dental services, home-nursing services, hospital services, and auxiliary services.

Medical services include general or family practice, and specialist service rendered on referral. Such services are rendered at the office, home, hospital, or elsewhere, as necessary. Dental services are in the same classification and places of service. Home-nursing consists of nursing care in the home by a registered nurse or a qualified practical nurse.

"In the provision of personal health . . . it shall be the policy to utilize . . . (1) any organized group of individuals, (2) any partnership, association or consumer co-operative, (3) any hospital or any hospital and its staff, or (4) any organization operating a voluntary health-service insurance plan or other voluntary health-service plan."

Eligibility for benefits is restricted: "If he has received (A) not less than \$150 in wages during the FIRST FOUR of the LAST SIX QUARTERS PRECEDING the beginning of the benefit year, or has earned if self employed (B) not less than \$50 in wages in each SIX CALENDAR QUARTERS during the first twelve of the last fourteen quarters preceding the beginning of the benefit year." You cannot benefit unless you earned at least \$150 a year and a half before the beginning of the benefit year-if employed, but if self-employed you must earn \$50 in six three-month periods of the first three years of a three and a half-year period. This is rather complicated, but it means a self-employed person to become eligible for benefits must have been under

the plan for three and a half years. Provision is made for benefits to the needy.

"Payments to hospitals shall be based on the LEAST EXPENSIVE MULTIPLE-BED accommodations" unless the patient's condition makes private accommodations essential. Rates of payments to general medical, and dental practitioners, specialists, et cetera, shall be arrived at by regard for the annual income or its equivalent which the payments will provide. Such payments "shall be sufficient to encourage high standards in the quality of services furnished, to give assistance in their opportunities for postgraduate study, and to allow for adequate vacations."

We have found no tax provision in the bill, but "there shall be appropriated to the account for the fiscal year ending June 30, 1950, and for each year thereafter (1) sums equal to 3 per centum of all wages (earning up to \$3,600) estimated to be received during the year. But there shall be appropriated to the account in the fiscal year 1949 a sum equal to 1 per centum of all wages."

THIS BILL IS AN INCOME TAX ON THE LOW INCOME GROUP. NO EXCEPTIONS ARE ALLOWED.

MICHIGAN'S TESTIMONY FOR S-545 BEFORE SENATE COMMITTEE

EDWARD F. SLADEK, M.D., of Traverse City, Chairman of the Council MSMS, was selected as Michigan's representative to testify on the Taft-Ball-Smith-Donnel Health Bill. He testified June 6, 1947.*

The health of our people can be materially benefited by the passage of S-545.

The efficacy of any national medical care program can be judged only by its value at the local level. My county of 25,000 population is typical of those rural areas which are removed from the influence of great urban centers. At this level, the operation of a voluntary prepaid medical care plan has made, over the past few years, a major contribution to the health of the entire population of my county. S-545 favors a continued development and encouragement of such voluntary plans.

Care is adequate for the people, under voluntary medical care plans, as encouraged by S-545. Such plans are desirable to the patient and satisfactory to the doctor.

S-545 can enlarge the coverage of voluntary

*The full text of Dr. Sladek's statement before the Committee is published on page 756.

prepaid medical care plans to include the medically indigent.

Service can be all-inclusive under a voluntary prepaid medical care plan, to cover all groups: the self-supporting, the indigent, the medically indigent, as well as those in the federal assistance categories (clients of old age assistance, aid to dependent children, aid to the blind, et cetera). A classic example is the Veterans Administration agreement with Michigan Medical Service for "home town" medical care of veterans—a plan which works equally as well in the community of 25,000 population as it does in the largest city of the state—and through which quality medical service is being rendered by a willing medical profession to the complete satisfaction of both the patients and the government.

WHAT OF OSTEOPATHY?

OSTEOPATHY has been making gains in amount and type of practice which osteopathic practitioners are allowed, or assume the right, to do. Older physicians will remember the first attempts at invasion of medical practice, how they secured entrance in one state after another, to practice a type of physical medicine. They repudiated the older field of medicine and surgery, claiming a better theory. At first they were quite popular with large classes of people who did not wish to use or have drugs prescribed for them.

The State Board Number of the *Journal of the American Medical Association* May 17, 1947, reports examinations in fifteen states, where osteopathic graduates are allowed to take the Medical Board examination: Colorado, Connecticut, Delaware, District of Columbia, Indiana, Massachusetts, Nebraska, New Hampshire, New York, New Jersey, Ohio, Oregon, Texas, Virginia, Wisconsin and Wyoming. In all, 802 osteopaths have been licensed by examination in these states in 1941-1946, and 152 by reciprocity or endorsement. The schedules of practice under these acts differ somewhat. In Connecticut, Indiana, New York, New Hampshire, Nebraska, they may practice medicine and surgery; in Colorado, medicine; in others, osteopathy.

In Michigan, as in many other states, osteopaths have assumed the practice of medicine and surgery and obstetrics under their own practice laws. During the years various governmental and industrial groups have recognized them for services, and

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during the war, owing to an actual shortage of doctors of medicine, created by the military chiefs of this country who demanded M.D.'s and not D.O.'s practice, osteopaths extended their privileges. The Selective Service accentuated the condition by exempting osteopaths and osteopathic students from the draft, but would not grant the same privilege to M.D.'s. Doctors of Medicine in large numbers were called from small towns, rural areas, and many of our countries became shorthanded. These could be replaced only by osteopaths, for no other practitioners were available.

Only one result could be forthcoming. General and rural practice has largely been pre-empted by young, ambitious cultists ready to seize new opportunities, ready to make home calls and night calls where the older doctor of medicine, worn out by the terrific grind of service to double his ordinary round of patients, could not respond.

The result! We have a growing situation of two overlapping groups trying to care for the public. The best thought and efforts of our membership are needed to solve the problem presented.

POSTOPERATIVE PULMONARY EMBOLISM*

APPROXIMATELY ONE out of every 1,100 postoperative surgical patients dies from fatal pulmonary embolism. Statistics supporting this conclusion are derived from several hundred thousand surgical patients surveyed in large reputable surgical clinics in this country. While this death rate due to thrombo-embolic pathologic conditions is not enormous, yet it merits real consideration toward its reduction.

Treatment designed to combat this type of surgical catastrophe roughly falls under one of three plans. The first is largely preventive. Under this heading comes the perfect preparation of the patient for surgery. As excellent physical condition as possible should be achieved and all of the various elements of the blood brought up to normalcy. The operation itself should be done gently, meticulously and with complete hemostasis. Non-absorbable sutures should be used wherever possible. Postoperatively the patient should be encouraged to exercise as much as possible, to change

his position in bed frequently, to see there is no type of pressure in the popliteal space by bed arrangement, to practice deep breathing exercises and perhaps stay away from tobacco both preoperatively and postoperatively because of the vaso-spastic effect. Ambulation as early as possible for each individual case should be strongly encouraged inasmuch as there are definite statistics showing the greatly decreased thrombo-embolic phenomena where early ambulation is practiced.

Under the second plan of treatment we have the anticoagulants. Barker at the Mayo Clinic has conclusively shown that thrombo-embolism can be decreased almost to zero by intelligent use of dicoumarol. Bauer has obtained somewhat comparable results from heparin.

Definite pitfalls exist in this type of treatment however in the matter of varying sensitivity of patients to these drugs. Where the sensitivity is great, prothrombin and coagulation times may be so lengthened that resultant wound and internal hemorrhages can occur. In the case of dicoumarol if very careful observation of the patient is practiced and the daily prothrombin rate is kept between 30 and 40 per cent of normal, then excellent results can usually be obtained.

The third plan of treatment entails the various vein ligations advocated by such men as Allen, Coleman, Detakats and others. While excellent results are obtained here, it must be remembered that the greatest percentage of thrombo-embolic deaths occur without any warning whatever; hence it is impossible in the majority of cases to determine when the ligations should be done. These ligations usually are done in the superficial femoral vein just distal to the profunda. However, ligations can be carried out in the common femoral, iliac or even the vena cava. Many of these particular procedures are major operations in themselves, and it is our opinion that they will not stand the test of time.

In summary, we favor the excellent preparation of the patient, careful, gentle, meticulous surgery, early exercise and ambulation with the use of dicoumarol therapy in the selected operations where thrombo-embolism is most apt to develop. Such operations are those on the uterus, bladder, prostate, rectum, colon, gangrenous appendices, biliary tract and hernias in obese subjects.

RUSSEL L. MUSTARD, M.D.

*This abstract from the first annual meeting of the Michigan Postgraduate Clinical Institute was so important that we are using it as a Scientific Editorial and have asked Dr. Mustard to write a more extensive paper on the subject, which will appear in a future number of THE JOURNAL.

THE 82nd ANNUAL SESSION MICHIGAN STATE MEDICAL SOCIETY

Pantlind Hotel-Civic Auditorium, Grand Rapids, September 23-26, 1947

INFORMATION

Registration, Tuesday noon to Friday noon, September 23-26, exhibit floor, Civic Auditorium, Grand Rapids.

No registration fee to MSMS members.

Admission by badge only.

Postgraduate Credits given to every member who attends MSMS Annual Session.

Seven General Assemblies—Twelve Sectional meetings—twenty-three Discussion Conferences on September 23-24-25-26.

Public Meeting. The Fourth General Assembly, Wednesday, September 24, 8:30 p.m.—Officers' Night—will be open to the public. Invite your patients and friends to hear an internationally famous personage scheduled for this program.

Papers will begin and end on time. This scientific meeting will feature by-the-clock promptness and regularity.

House of Delegates, MSMS, convenes Sunday, September 21 at 2:00 p.m., Ballroom, Pantlind Hotel; it will hold two meetings on Monday, September 22, at 10:00 a.m. and at 8:00 p.m., and conclude with a breakfast and meeting Tuesday, September 23, at 8:00 a.m.

One hundred four technical exhibits and a score of scientific exhibits will contain much of interest and value. Intermissions to view the exhibits have been arranged.

Please register at every booth.

Burton R. Corbus, M.D., Grand Rapids, is General Chairman of the Grand Rapids Committee on Arrangements for the 1947 MSMS Annual Session.

Committee on Scientific Exhibits—**J. W. Logie, M.D.**, Grand Rapids, and **John M. Wellman, M.D.**, Lansing.

Press Relations Committee for the scientific session—**C. A. Payne, M.D.**, Chairman, assisted by **G. T. Aitken, M.D.**, and **J. R. Brink, M.D.**, all of Grand Rapids.

Parking—Do not park your car on the street. Convention parking near the Civic Auditorium will be marked off with suitable sidewalk signs. The Grand Rapids Police Department will issue courtesy cards (at Registration Desk) for out-of-town autos, which give parking privileges but do not apply to metered spaces. Nearby parking lots are available, as well as convenient indoor parking facilities. The indoor parking rate at the Pantlind Garage is \$1.00 for twenty-four hours. This is close to the Pantlind Hotel.

The Woman's Auxiliary to the Michigan State Medical Society will present an attractive social and business program to which the wife of every MSMS member is cordially invited.

GENERAL ASSEMBLIES

Tentative Program

All General Assemblies will be held in the Black and Silver Ballroom of the Civic Auditorium, except the Fourth Assembly of Wednesday evening, September 24, which will be held in the Ballrooms of the Pantlind Hotel.

First General Assembly

TUESDAY, SEPTEMBER 23 (afternoon)

P.M.

- 1:40 **Allen O. Whipple, M.D.**, New York, Emeritus Valentine Mott Professor of Surgery, Columbia University, Clinical Director, Memorial Hospital, New York City. "The Early Diagnosis of Pancreatic and Ampullary Growths, with an Evaluation of Surgical Therapy."
- 2:00 **Andrew C. Ivy, M.D.**, Chicago, Vice President, University of Illinois. "The Diagnosis of Jaundice from a Therapeutic Viewpoint."
- 2:20 **Wendell G. Scott, M.D.**, St. Louis, Mo., "The Investigation of Low Back Pain by Radiographic Methods."
- 3:45 **Louis Schwartz, M.D.**, Washington, D. C., Medical Director (Retired), Consultant to Officers of Dermatology, U.S.P.H.S. "Diagnosis, Prevention and Treatment of Occupational Dermatitis."
- 4:05 **C. B. Lull, M.D.**, Philadelphia, Director, Division of Obstetrics and Gynecology, Pennsylvania Hospital, Consultant Obstetrician and Gynecologist to the Philadelphia General Hospital, Chief of Staff and Consultant to the Delaware County Hospital. "The Changes and Improvements in Obstetric Practice During the Past Twenty-Five Years."

Second General Assembly

WEDNESDAY, SEPTEMBER 24 (morning)

A.M.

- 9:30 **Frederic E. B. Foley, M.D.**, St. Paul, Minn. "The Part of the General Practitioner in the Management of Vesical Neck Obstruction."
- 9:50 **Harry Gold, M.D.**, New York, Associate Professor of Pharmacology at Cornell University Medical School, Attending Cardiologist at the Beth Israel Hospital and at the Hospital for Joint Diseases, New York. "Management of the Failing Heart."
- 11:10 **Russell L. Cecil, M.D.**, New York, Professor of Clinical Medicine, Cornell University Medical College, Visiting Physician Bellevue Hospital, Consulting Physician New York and Veterans Hospitals. "Chronic Arthritis."
- 11:30 **George M. Curtis, M.D.**, Columbus, Ohio. "Surgery of the Spleen."

THE 82ND ANNUAL SESSION

Third General Assembly

WEDNESDAY, SEPTEMBER 24 (afternoon)

P.M.

- 1:40 *A. D. Campbell, M.D., Montreal, Canada.* "Certain Aspects of Vaginal Surgery."
- 2:00 *John R. Lindsay, M.D., Chicago,* Professor of Otolaryngology, University of Chicago. "Vertigo: Differential Diagnosis and Treatment."
- 2:20 *R. V. Platou, M.D., New Orleans, La.* "The Tuberculous Child."
- 3:45 *Reynold A. Jensen, M.D., Minneapolis.* "The Physician and the Child."
- 4:05 *C. F. Dixon, M.D., Rochester, Minn.* "Carcinoma of the Colon and its Management."

Sixth General Assembly

THURSDAY, SEPTEMBER 25 (afternoon)

P.M.

- 1:40 *Paul A. O'Leary, M.D., Rochester, Minn.,* "The Use of Penicillin in the Treatment of Syphilis in General Practice."
- 2:00 *L. Emmett Holt, Jr., M.D., New York.* "The Treatment of Infantile Diarrhea."
- 2:20 *R. L. Haden, M.D., Cleveland, Ohio.* "Gout."
- 3:45 *Joseph D. Aronson, M.D., Philadelphia.* "The Role of BCG Vaccine in the Control of Tuberculosis."
- 4:05 *S. W. Harrington, M.D., Rochester, Minn.* "Cancer of the Breast."

Fourth General Assembly

WEDNESDAY,
SEPTEMBER 24
(evening)

Public Meeting

P.M.

- 8:30 **OFFICERS' NIGHT.** Presidential Address and Induction of New President

Biddle Oration

Rear Admiral C. A. Swanson, MC, USN, The Surgeon General, Washington, D. C., "Atomic Radiation and Its Medical Implications."



Looking for a Diagnosis?

Save time and effort—spare yourself a frantic search
for the diagnosis of an unusual case

Attend your MSMS Annual Session;
Learn the Easy Way.

THURSDAY,
SEPTEMBER 25
(evening)

STATE SOCIETY NIGHT

P.M.

- 10:00 Dancing for MS-MS members and their ladies. Ballroom, Pantlind Hotel, Grand Rapids.

Fifth General Assembly

THURSDAY, SEPTEMBER 25 (morning)

A.M.

- 9:30 *R. H. Williams, M.D., Boston.* "Comparison of Chemical and Physical Methods of Treating Thyrotoxicosis."
- 9:50 *C. S. O'Brien, M.D., Iowa City, Iowa.* "Senile Cataract from the Standpoint of the General Practitioner."
- 11:10 *Frank E. Whitacre, M.D., Memphis, Tenn.* "The Diagnosis and Treatment of Ectopic Pregnancy."
- 11:30 *Michael DeBakey, M.D., New Orleans.* "Therapeutic Application of Hemometakinesia in Peripheral Vascular Disturbances."

Seventh General Assembly

FRIDAY, SEPTEMBER 26 (morning)

A.M.

- 9:30 *Clement A. Smith, M.D., Boston.* "The Potentialities and Limitations of Prenatal Pediatrics."
- 9:50 *Alan R. Moritz, M.D., Boston.* "When and Why Should the State Compel the Performance of an Official Autopsy?"
- 11:10 *W. Wayne Babcock, M.D., Philadelphia.* "Closure of Abdominal Fistula."
- 11:30 *W. E. Herrell, M.D., Rochester, Minn.* "The Present Status of Sulfonamide and Antibiotic Therapy."

General Assemblies end at 11:50 a.m.

SECTION MEETINGS

Tentative Program

Tuesday, September 23, 12:00 noon to 1:30 p.m.

(luncheon meetings)

1. *Dermatology*, Room 222, Pantlind Hotel
Louis Schwartz, M.D., Washington, D. C., "Dermatitis from Wearing Apparel."
2. *Radiology*, Sadler Lounge, Pantlind Hotel
W. G. Scott, M.D., St. Louis, Mo. "Prolapses of the Gastric Mucosa as a cause of Gastrointestinal Symptoms."

Wednesday, September 24, 12:00 noon to 1:30 p.m.

(luncheon meetings)

3. *Urology*, Room 322, Pantlind Hotel
Frederic E. B. Foley, M.D., St. Paul, Minn.
"An Artificial Sphincter—a New Device and Operation for Control of Urinary Incontinence and Nocturnal Enuresis."
4. *Pediatrics*, Sadler Lounge, Pantlind Hotel.
R. V. Platou, M.D., New Orleans, La. "Management of Infantile Congenital Syphilis."
5. *Surgery*, Ballroom, Pantlind Hotel
C. F. Dixon, M.D., Rochester, Minn. "Importance of Preoperative and Postoperative Care in Intestinal Surgery."
George M. Curtis, M.D., Columbus, Ohio—Discussant.
6. *Otolaryngology*, Room 222, Pantlind Hotel
John R. Lindsay, M.D., Chicago. "The Significance of Postural Vertigo in Otoneurological Diagnosis."

Thursday, September 25, 12:00 noon to 1:30 p.m.

(luncheon meetings)

7. *Anesthesia*, Room 322, Pantlind Hotel
Round Table on "Economic Problems in Anesthesiology."
R. J. Armstrong, M.D., Kalamazoo, Mich., Leader.
8. *Ophthalmology*, Room 222, Pantlind Hotel
C. S. O'Brien, M.D., Iowa City, Iowa. "Surgery of the Extraocular Muscles."
9. *Medicine*, Furniture Room, Pantlind Hotel.
H. M. Pollard, M.D., Ann Arbor. "Recent Developments in the Management of Peptic Ulcer."
10. *Gynecology-Obstetrics*, Schubert Room, Pantlind Hotel
Harold C. Mack, M.D., Detroit. "Changing Trends in Cesarean Section."
11. *General Practice*, Ballroom, Pantlind Hotel.
R. L. Cecil, M.D., New York. "Unusual Forms of Rheumatic Pain."

Friday, September 26, 12:00 noon to 1:30 p.m.

(luncheon meetings)

12. *Pathology*, Room 222, Pantlind Hotel
F. Roland Allaben, LL.B., City Attorney, City of Grand Rapids. "The Doctor in Court."
Alan R. Moritz, M.D., Boston—Discussant.

Committee Reports

ANNUAL REPORT OF COMMISSION ON HEALTH CARE—1946-47

The experience of the Commission on Health Care during the year 1946-1947 leads increasingly to the conclusion that the activities of the State Medical Society relating to irregular practice of all types, need to put forward continuous effort from the standpoint of legislation and law enforcement. Beyond this we are increasingly convinced that the best results as relating to the problems created by so-called "doctors" (not M.D. and D.D.S.) in the health field, is more and better care of the public by the regular health professions.

There is evidence that good health care can be markedly increased by the careful development of "Medical Associates." To this end effort has been put forth this year. We have been handicapped by lack of funds, but more have been forthcoming recently, and at least for a time a full-time secretary has been assigned to the Commission.

Committees are working on the following divisions:

The Division of Dental Associates
The Division of Dietetics
The Division of Medical Secretaries and Librarians
The Division of Nursing
The Division of Clinical Laboratory Assistants
The Division of Physical Medicine and Occupational Therapeutics
The Division of Ophthalmic Associates
The Division of Orthopedics and Dermatology
The Division of X-Ray Technicians
The Division of Clinical Psychology
The Division of Medical and Surgical Art and Photography
The Division of Associates to Hospital Administrators
The Division of Economics of the Health Services
The Division of Pharmacy
The Division of Public Health (and Veterinarian Services).

It seems apparent that for every doctor of medicine and dentist in the United States, about nine others are required somewhere in the health field to care for health needs. These are auxiliary to the doctors of medicine and dentists, and essential to the distribution of medical care. With 130,000 physicians, and 70,000 dentists, that means 1,800,000 associates to the doctors of medicine and the dentists. At only \$200.00 per month, this represents over four billion dollars needed annually, to provide for those who are necessary if the medical and dental professions are to distribute medical care efficiently. Our estimate is very low; five billion would come closer to it.

These considerations call to our attention the following points:

1. The big business in terms of money represented in the care of the people through the health services.
2. The stake that the government has in it from the standpoint of public health.
3. The temptation held out to politicians in wanting to control such vast resources.
4. The possibilities of political mal-use of medical Associates, if left to politics alone.
5. The need, therefore, of our seeing the whole picture and setting it up to be administered by the health professions who ought to be able to direct it efficiently.
6. The need of our being in position to place in the hands of our representatives in Congress, organization detail to implement such legislation in the interests of the people, such as the Taft bill.
7. The need of a system, set up and managed by the health professions, into which all necessary government

JOUR. MSMS

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health activities can enter on a basis not unlike the co-operation of the government with Michigan Medical Service Veterans' care.

8. The need for the medical profession to provide something better than we would expect compulsory health insurance to be or to expect the people to vote for compulsory health insurance.

The United States government is our government, too. Let us place ways and means for health care, as we think it should be, in the hands of our representatives in Congress, so that both they and the people may vote for it.

Respectfully submitted,

RALPH H. PINO, M.D., *Chairman*
H. M. POLLARD, M.D.
B. R. CORBUS, M.D.
F. H. DRUMMOND, M.D.
H. A. KEMP, M.D.

ANNUAL REPORT OF COMMITTEE ON DISTRIBUTION OF MEDICAL CARE—1946-47

The committee met in Detroit at the David Whitney House on December 11, 1946, for the purpose of studying and making recommendations on present and future problems.

The problem of collection of fees for emergency hospitalization services to veterans with non-service connected disability was discussed, and it was decided to appoint a subcommittee who should act as an advisory committee to assist the Michigan Office of Veterans Affairs in this matter. Dr. E. M. Vardon was later appointed as the committee.

Dr. Carleton Dean explained in detail to our committee the need for extended physical restoration programs and for legislative aid to afflicted adults. It was recommended that Dr. Dean be placed on a subcommittee of the Michigan State Medical Society Commission on Health Care and also that it be recommended to The Council of the Michigan State Medical Society that it urge creation of physical restoration courses in the universities.

Respectfully submitted,

C. W. COLWELL, M.D., *Chairman*
S. W. INSLEY, M.D., *Vice Chairman*
W. W. BABCOCK, M.D.
R. H. BAKER, M.D.
GEORGE CURRY, M.D.
H. F. DIBBLE, M.D.
O. K. ENGELKE, M.D.
C. E. LEMEN, M.D.
R. H. PINO, M.D.
E. C. SITES, M.D.
E. C. TEXTER, M.D.
E. M. VARDON, M.D.
W. R. YOUNG, M.D.

ANNUAL REPORT OF MEDICAL LEGAL COMMITTEE—1946-47

No meeting of the Medical Legal Committee has been held during the past year. As has been the custom for several years, the function of this committee has been to act in an advisory capacity only.

Only one physician has consulted the chairman of the committee about a threatened malpractice suit. This man did not carry any form of malpractice insurance, and all we could do was to advise him that he should employ an attorney with experience in such cases and await results.

It is again reiterated that every physician in the state should notify the Executive Secretary of the Michigan State Medical Society at once, if a suit is threatened.

Respectfully submitted,

S. W. DONALDSON, M.D., *Chairman*
F. A. MERCER, M.D.
W. B. MITCHELL, M.D.
W. J. STAPLETON, JR., M.D.

ANNUAL REPORT OF PREVENTIVE MEDICINE COMMITTEE—1946-47

In the year just passed the Committee on Preventive Medicine has held two meetings at which the activities of its advisory groups were thoroughly discussed and indicated recommendations passed on to The Council of the Society.

Prominent in these discussions were:

1. The question of further extension of the effort of the Scientific Radio Committee in the direction of broader coverage;
2. Progress made by the Iodized Salt Committee towards stimulating renewed lay and medical interest in this valuable preventive measure;
3. Planning of a long-range investigation of hypertension by the Committee on Degenerative Diseases;
4. Recommendations for a standard procedure to be followed in the reporting, prevention and management of infectious diarrhea in the newborn;
5. Follow-up studies by the Child Welfare Committee of the survey conducted in co-operation with the Academy of Pediatrics; and
6. A discussion of present and future activities of the Rheumatic Fever Control Committee.

The Committees on Cancer Control, Venereal Disease Control, Mental Hygiene, Maternal Welfare and Industrial Health have all been active in carrying out programs previously set up.

Reports of all advisory committees appearing in these pages offer but brief testimony of the effort and devotion in the interest of the public and the Society.

As in former years, the co-operation of the State Health Department under Commissioner Wm. DeKleine, was ever available and always helpful.

Respectfully submitted,

WM. S. REVENO, M.D., *Chairman*
A. E. CATHERWOOD, M.D.
B. R. CORPUS, M.D.
H. H. CUMMINGS, M.D.
WILLIAM DEKLEINE, M.D.
H. A. LUCE, M.D.
K. E. MARKUSON, M.D.
R. D. MCCLURE, M.D.
R. M. MEKEAN, M.D.
N. F. MILLER, M.D.
H. M. POLLARD, M.D.
L. W. SHAFFER, M.D.
FRANK VANSCHOICK, M.D.
W. R. VIS, M.D.

ANNUAL REPORT OF CANCER CONTROL COMMITTEE—1946-47

The Cancer Control Committee was enlarged this year by President Hyland through appointment of the members of the Professional Executive Committee of the American Cancer Society, Michigan Division, and of representatives of the Michigan Department of Health to the Committee as formerly constituted. This made a committee of twenty-five members, and, thus, for the first time in Michigan, one committee represents all organizations in the state interested in the cancer problem. One member of the committee was appointed secretary on a full-time salary basis, with offices in Ann Arbor. Secretarial and other committee expenses were met by contributions from the American Cancer Society, Michigan Division, Michigan Department of Health, and the Michigan State Medical Society.

Four meetings of the Cancer Control Committee were held during the year; one each in October, December, April and May. At the first meeting, three subcommittees were appointed and assigned definite duties relating to the cancer control program in the state. An outline of their accomplishments follows:

The subcommittee on Education studied the problem of lay and professional education, one result of which was the formation of a Speakers' Bureau composed of

COMMITTEE REPORTS

sixty-two physicians, well distributed over the lower peninsula. Members of this Bureau have spoken at almost forty lay meetings arranged through the secretary's office. Many other similar meetings were held by arrangement through the office of the Michigan Division, American Cancer Society, which were not reported to the secretary's office.

One of the major professional education undertakings was the distribution of the Michigan Cancer Bulletin to all members of the Michigan State Medical Society. The cost of this bulletin and its distribution was met by the Michigan Department of Health. This series of bulletins, adapted from the Illinois Cancer Bulletin, consists of thirteen numbers, each number discussing the diagnosis and treatment of one or more major types of cancer. The information in these bulletins will bring down to date the *Cancer Manual* for Physicians published jointly by the Michigan State Medical Society and the Michigan Department of Health about four years ago.

The subcommittee on Education has edited a series of fourteen newspaper articles on cancer for the layman, which were distributed throughout the state by the Michigan Division of the American Cancer Society.

Each county medical society has been urged to hold at least one cancer meeting during the year and, where-ever possible, to have a cancer teaching day for the physicians of a county or district. Five such meetings are known to have been held during the year: two in Battle Creek, and one each in Flint, Mt. Pleasant, and Benton Harbor. Others are scheduled for later in the year.

Under the direction of the subcommittee on Education, a meeting was held in Marquette in June for chairmen of cancer committees and health officers of the Upper Peninsula to discuss education and other cancer control problems in that area. Three committee members and a representative of the Michigan Department of Health attended this meeting.

During the year, four radio broadcasts were given by members of the subcommittee on Education over the University of Michigan station and affiliated stations.

The Dean of the School of Public Health of the University of Michigan has been urged to place more emphasis on the subject of cancer in the training of professional public health personnel; also, to hold an in-service seminar or institute of two or more days' duration for professional health workers at a convenient time in the near future. A favorable reaction was obtained toward both of these suggestions.

The subcommittee on Ways and Means held one meeting during the year to survey the extent of existing funds for cancer work, and to discuss the future collection and disbursement of funds for cancer control purposes in Michigan.

The Fact-Finding subcommittee organized a statewide cancer survey, the field work of which was carried out during July and August by trained third-year medical students. This survey consisted of two parts: (1) the collection of comparable data from each hospital of 25 beds or more, showing bed capacity, facilities for diagnosis and treatment of cancer patients, the number of such patients cared for, and similar data; (2) an intensive pilot survey of four local areas—Hillsdale County, Kent County, the district of Antrim, Charle-voix and Emmet counties, and the district of Baraga, Houghton and Keweenaw Counties—was carried out on invitation of the medical societies in each area. In these surveys, data regarding every cancer patient seen by each physician or cared for in the hospitals in these four areas in 1946 were recorded on special blanks so that statistical analyses could be made of the information obtained. These studies, which should give valuable information on the incidence and prevalence of cancer in these local areas, and indirectly in the state as a whole, will not be completed for several months.

These surveys have been endorsed by the Michigan Hospital Association, Michigan State Nurses Association, and the Michigan State Dental Society.

At each meeting of the Cancer Control Committee, in addition to considering the many problems relating to the control of cancer in Michigan, an invited speaker has discussed some special cancer subject. These speakers and their subjects have been as follows:

Lewis C. Robbins, M.D., Cancer Consultant, U. S. Public Health Service, Chicago.

"The State-Aid Cancer Program of the U. S. Public Health Service."

R. L. Mason, M.D., American Cancer Society, New York.

"The American Cancer Society Program."

Paul R. Gerhardt, M.D., Director, Cancer Control Division, West Virginia State Department of Health, Charleston.

"The West Virginia Cancer Control Program."

W. E. Murray, D.Sc., Executive Director, Detroit Cancer Institute, Detroit.

"What's New in Cancer Research."

J. Ernest Ayre, M.D., Royal Victoria Hospital, Montreal, Quebec.

"The Cell Smear Technique in Cancer Diagnosis."

These special discussions have been of material help to committee members in formulating plans for the cancer control program in this state. These speakers came at the expense of the organization they represented. Or their expenses were paid by the Michigan Department of Health.

The Secretary's office has answered many inquiries from Michigan and other states regarding the cancer program. The Committee has given advice and helpful suggestions to several local medical organizations in the state regarding the organization and functioning of cancer detection centers.

Advantage has been taken of all opportunities to encourage added emphasis on the cancer control problem among professional and lay organizations throughout the state.

The Committee urges a continuation and expansion of this broad program of education and service in the cancer field during the coming year.

Respectfully submitted,

N. F. MILLER, M.D., *Chairman*

W. A. HYLAND, M.D., *Ex officio*

F. A. COLLIER, M.D., *Advisor*

F. L. RECTOR, M.D., *Secretary*

M. R. BURNELL, M.D.

D. C. BURNS, M.D.

E. I. CARR, M.D.

WILLIAM DEKLEINE, M.D.

S. E. GOULD, M.D.

C. K. HASLEY, M.D.

L. E. HOLLY, M.D.

A. A. HUMPHREY, M.D.

C. H. KEENE, M.D.

O. W. LOHR, M.D.

H. F. MATTSON, M.D.

W. D. MAYER, M.D.

A. B. MCGRAW, M.D.

H. M. NELSON, M.D.

H. M. POLLARD, M.D.

H. W. PORTER, M.D.

H. R. PRENTICE, M.D.

W. W. SAWYER, M.D.

B. F. SOWERS, M.D.

H. J. VANDENBERG, M.D.

H. L. WEITZ, M.D.

BERNIE LUCK, D.D.S.

COMMITTEE REPORTS

ANNUAL REPORT OF CHILD WELFARE COMMITTEE, 1946-47

The Child Welfare Committee has had only one formal meeting this year, but the chairman has met informally with small groups many times while attending other meetings.

The entire activity of the committee has been devoted to the co-operative study with the American Academy of Pediatrics and the Society for Crippled Children and Disabled Adults. This Study of Child Health Service has been completed in Michigan with a high degree of success. A few statistics will attest to this statement.

80% return of all Michigan State Medical Society members.

80% return of all Michigan State Dental Society members.

99% return of all pediatricians.

95% return of all health jurisdictions.

80% return of all hospital beds.

This represents a far better than average return.

The coming year the committee with others will be charged with processing the data accumulated in the study and publicizing the findings. To this end the Society for Crippled Children and Disabled Adults already has underwritten the estimated cost of publication of this material.

Respectfully submitted,

FRANK VANSCHOICK, M.D., *Chairman*
R. M. KEMPTON, M.D., *Vice Chairman*
MOSES COOPERSTOCK, M.D.
CARLETON DEAN, M.D.
CAMPBELL HARVEY, M.D.
A. M. HILL, M.D.
J. L. LAW, M.D.
A. L. RICHARDSON, M.D.
L. P. SONDA, M.D.
KENNETH WELLS, M.D.

ANNUAL REPORT OF COMMITTEE ON VENEREAL DISEASE CONTROL—1946-47

Five regular meetings and a special meeting of the Venereal Disease Control Committee were held during the past year. A special meeting was held with representatives of the Michigan Society of Pathologists at the Book-Cadillac Hotel on Wednesday evening, March 5, 1947.

At the first meeting October 27, 1946, means of improving contact-finding in cases of infectious venereal disease were discussed. A subcommittee was appointed to study and report on the Mississippi plan of "self interview." The status of special dispensation for marriage certification was discussed and a subcommittee appointed to draw up new regulations. Dr. G. D. Cummings reported on the status of complement fixation and quantitative Kahn tests. He hoped to make them available, at least on request.

At the meeting of December 15, 1946, the problem of contact finding was further discussed. It was hoped that a special study of the Mississippi "self interview" plan might be tried in Ingham County. It was suggested that the problem of case finding in infectious venereal disease be called to the county medical society's attention through the Secretary's Letter.

At the meeting of January 26, 1947, the report of the subcommittee on requirements for special dispensation was reviewed, discussed and approved. These requirements along with reprints of the committee's articles on "Serologic Interpretation" and "Use of Penicillin in Syphilis" were to be mailed to each physician through the Michigan Health Department. The subcommittee on reporting of laboratory evidence of venereal disease by private laboratories reported recommendations.

JULY, 1947

At the joint meeting with the Michigan Society of Pathologists held in Detroit, March 5, 1947, the problem of private laboratories was discussed, reporting at some length. The general attitude was favorable to such reporting. However, since only three pathologists were present, Dr. Breakey and Dr. Stiles were appointed by the Chair to attend the next meeting of the Society of Michigan Pathologists to be held in Saginaw, May 31, 1947.

At the last meeting of the committee held May 18, 1947, Dr. H. H. Cummings was present. The main items for discussion were medical and lay educational programs in venereal disease. Revival of metal posters for toilets, radio programs and the activity of the Public Relations Committee on sex education records for use in high schools was discussed. The recommendation that a one-day program be held for education of physicians in the modern diagnosis and treatment of venereal disease was unanimously approved.

A meeting is to be held in Muskegon on Saturday, July 26, 1947, with the committee members as the guests of Dr. Ray H. Holmes.

Respectfully submitted,

L. W. SHAFFER, M.D., *Chairman*
R. S. BREAKEY, M.D., *Vice Chairman*
K. A. ALCORN, M.D.
A. C. CURTIS, M.D.
RUTH HERRICK, M.D.
M. J. HOLDSWORTH, M.D.
R. H. HOLMES, M.D.
H. L. KEIM, M.D.
E. S. PARMENTER, M.D.
FRANK STILES, M.D.

ANNUAL REPORT OF MENTAL HYGIENE COMMITTEE, 1946-47

The Committee has taken very seriously its duties and responsibilities and has held a number of well-attended meetings.

The present-day emphasis on psychiatry has been of deep concern to the Committee. We feel that in this present era the pendulum has swung too far away from the center of resourceful human personalities. Too much faith has been put into academic solutions, at times of bizarre pattern. Too little stress has been placed on the affirmative approach that has as its goal the development within the individual of abilities to face realities and to develop a plan of living and an objective in life.

Your Committee has been concerned with the tendency of what might be classed as charlatanry. It has frequently come to our attention that individuals are taking advantage of the present-day misunderstanding of psychiatry and commercializing it, individuals who are neither adequately medically trained or, even worse, have not the properly adjusted type of personality to help those who need emotional guidance and direction. The medical practice act in our state has no screening capacity for eliminating those unfit to treat "the person in the body."

The Committee formulated a list of facts regarding mental health that it was felt desirable to make in order that the position of the Michigan State Medical Society in this field might be established.

These statements were approved by the Executive Committee of MSMS and as such stand as a record of the Society's position.

During the year THE JOURNAL has published under the sponsorship of this Committee and under the caption "STOP—LOOW—LISTEN" several columns of pithy statements. The purpose was to emphasize psychiatric facts of importance to the whole profession. Space does not allow repetition of these statements except to emphasize the caption: "STOP telling the patient there

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is nothing wrong with him—go home and forget it.” “LOOK for the facts as the patient sees them.” “LISTEN attentively and patiently to the patient’s story.”

During the year your Committee took active part in such legislation as concerned Mental Health subjects.

The Committee approved the establishment of a section on neuropsychiatry by the State Society, and by this action automatically recommends the same to the House of Delegates for approval at this meeting.

The Committee would like to emphasize an action taken by it and approved by the Executive Committee, to wit: that all general hospitals of over 200 bed capacity should have a division for psychosomatic and early potential psychiatric cases adequately staffed and equipped—again and again calling attention to the importance of early diagnosis and treatment.

During the year the Committee approved, and the Executive Committee of MSMS endorsed, the summary of Michigan’s mental health needs as outlined by Charles A. Zeller, M.D., State Director of Mental Health.

Your Committee requested space at the annual meeting where an advisory clinic could be established, to which physicians remote from psychiatric aid might bring their problems regarding patients who were making poor adjustments or, if desirable, might bring medically indigent patients for evaluation and advice. The Executive Committee, while approving the idea, did not see fit to allocate the space.

You will note that the Committee, in its modesty, has not tried to lay out a world-wide program to solve the emotional and political ills of this mundane sphere. However, it believes that a better understanding of human behavior and social relations, as understood by psychiatrists, can make a worth-while contribution to our hoped-for goals.

Respectfully submitted,

H. A. LUCE, M.D., *Chairman*
R. G. BRAIN, M.D.
F. P. CURRIER, M.D.
M. H. HOFFMANN, M.D.
R. A. MORTER, M.D.
R. W. WAGGONER, M.D.
O. R. YODER, M.D.

ANNUAL REPORT OF COMMITTEE ON IODIZED SALT—1946-47

The committee held one formal meeting on January 24, 1947, at the Wayne County Medical Society Building. At this meeting a report of the National Study Committee on endemic goiter was made. A pamphlet distributed by the Michigan State College entitled “Are You Using Iodized Salt?” was discussed. The results of a 1943 survey of the number of thyroid operations in seven Michigan hospitals was given. A motion requesting another survey to determine the incidence of goiter among school children was passed. This would be particularly valuable because of the previous surveys made in the Michigan schools.

Dr. Kimball and several others vitally interested in the iodized salt problems have introduced to the House of Representatives HR No. 2717 relative to the iodization of table salt. The congressional committee is to hear this bill in the near future, and we are to testify before this committee in an attempt to pass this very important bill.

Respectfully submitted,

ROY D. MCCLURE, M.D., *Chairman*
B. E. BRUSH, M.D.
L. W. GERSTNER, M.D.
D. E. LIGHTY, M.D.
R. J. MOEHLIG, M.D.
C. A. PAYNE, M.D.
L. E. SHOWALTER, M.D.
H. A. TOWSLEY, M.D.

ANNUAL REPORT OF COMMITTEE ON HEART AND DEGENERATIVE DISEASES—1946-47

Two meetings of the Heart and Degenerative Diseases Committee were held during the past year. Since rheumatic fever activities had graduated to a separate committee, it was felt that a new subject for study should be adopted.

The consensus of opinion of committee members was that hypertension in its various aspects would furnish its major project, and it was planned to assign to each member some particular facet for future development into a comprehensive discussion on that phase of the question. This series of reports might later be incorporated into a brochure for distribution to the profession, and possibly utilized as a fulcrum for a program of public education.

The chairman recommends that, since this a fairly long-time project, the personnel of the committee suffer no drastic changes over the next few years.

Respectfully submitted,

R. M. MCKEAN, M.D., *Chairman*
C. B. BEEMAN, M.D.
D. R. BOYD, M.D.
J. R. BRINK, M.D.
B. B. BUSHONG, M.D.
M. S. CHAMBERS, M.D.
F. P. CURRIER, M.D.
R. A. JOHNSON, M.D.
F. D. JOHNSTON, M.D.
MARK MARSHALL, M.D.
E. D. SPALDING, M.D.
A. E. VOGELIN, M.D.

ANNUAL REPORT OF ETHICS COMMITTEE—1946-47

Your Ethics Committee begs to report that it has had nothing to do during the past year.

This denotes a very healthy condition of affairs and is evidence of harmony within the profession.

Respectfully submitted,

G. B. HOOPS, M.D., *Chairman*
A. J. BAKER, M.D.
L. O. GEIB, M.D.
L. C. HARVIE, M.D.
M. M. MARRIN, M.D. (deceased)
E. T. MORDEN, M.D.
D. R. SMITH, M.D.
LEMOYNE SNYDER, M.D.

ANNUAL REPORT OF COMMITTEE ON NURSES’ TRAINING SCHOOLS, 1946-47

A complete report is not available, as contacts are yet to be made with the Board of Registration of Nursing and the Michigan State Nursing Association. A supplemental report will be made from the floor at the meeting of the House of Delegates upon completion of these matters. We are arranging for a meeting of the officers of both nursing groups to meet with the Nursing Committee of the Michigan State Medical Society.

Respectfully submitted,

C. G. CLIPPERT, M.D., *Chairman*
W. D. BARRETT, M. D.
R. L. HAAS, M.D.
E. A. OAKES, M.D.
W. J. SMITH, M.D.
D. W. THORUP, M.D.

ANNUAL REPORT OF BEAUMONT MEMORIAL COMMITTEE—1946-47

In the report of last year, the Chairman recommended that the Committee be retired. However, there have been some new developments this year and if the Presi-

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dent and The Council wish to have the Committee in being, it might still have a function.

The Early House was purchased through the generosity of Parke-Davis and Company and presented to the Mackinac Island State Park Commission. There has been a good deal of discussion concerning the proper use to which this house could be put. Professor Lorch, now Professor Emeritus of the School of Architecture of the University of Michigan, has been interested in this house from an historical viewpoint and he has been making a determined search to find out all the facts concerning the original construction and the subsequent additions made to this house.

As yet he has not been able to get the original plans of the house as it existed at the time of the wounding of Alexis St. Martin. The files of the American Fur Trading Company, The Astor estate and the Canadian Archives have been searched, and at the present time we are in communication with the central offices of the Hudson Bay Fur Trading Company in London. It is definitely established that this house has been rebuilt and added to on several occasions but the final story is not yet clear.

Because of this activity and in view of the fact that the Park Commission will, we are sure, be glad to have advice from the State Medical Society, we suggest to The Council and President that our Committee be continued or another one appointed so that consultation from the State Society can be available to the Park Commission and to the historians now studying the problem.

Respectfully submitted,

F. A. COLLIER, M.D., *Chairman*
A. W. McDONALD, M.D., *Vice Chairman*
F. C. KIDNER, M.D.
A. W. LESCOHIER, M.D.
H. C. MAYNE, M.D.

ANNUAL REPORT OF COMMITTEE ON RHEUMATIC FEVER CONTROL—1946-47

The Committee on Rheumatic Fever Control held six meetings during the past year. The diagnostic groups in the various areas of the state examined 397 children referred to them and established the diagnosis of rheumatic fever in 150. These cases were drawn from about one-half the population of the state since several populous counties had not yet been activated. The number of centers is being increased by five since last year, and these centers are being established at Muskegon, Battle Creek, Saginaw, Pontiac, and Port Huron.

Financial support of the diagnostic centers has been adequate due to the magnificent gift of \$15,000 from the Michigan Society for Crippled Children and Disabled Adults. This fund has been renewed for the coming year.

A national women's fraternity alumni association, Alpha Phi, has asked to co-operate with us in any possible way they may help in the work.

At a recent meeting of the committee with representatives from the fraternity, their organization was outlined, and the suggested methods, by which assistance can be given, were as follows:

(a) It was suggested that some centers, such as Traverse City, which covers a wide area, could use assistance in providing transportation to and from the center for patients to be examined.

(b) Some centers might be able to use secretarial and other assistance in preparing the patients for examination on examination day, possibly requiring three or four hours weekly for one or two persons.

(c) Qualified individuals would be welcomed to assist the public health nurses in follow-up of cases under the direction of the diagnostic group.

(d) There is a great need for summer camp convalescent facilities for children recovering from rheumatic fever. Competent medical guidance by physicians

and nurses and play-ground supervisors should be provided.

(e) It was also suggested that some individuals who are classified as indigent find it difficult, or impossible, to finance the laboratory examination fees. Possibly the Alpha Phi Fraternity Alumni Groups might be able to provide facilities for the cost involved with reference to the diagnosis of rheumatic fever in this income group.

(f) Another important service the Fraternity might render is that of helping to spread accurate information concerning rheumatic fever with especial reference to its widespread prevalence, the need for early recognition and treatment and co-operation in the rheumatic fever program.

The educational activities of the lay groups can be greatly augmented.

This affiliation with the volunteer workers through the state will be a great assistance to the local diagnostic groups.

It is hoped that within the next year the entire state will be activated in a state-wide program, by which any physician may share the responsibility of diagnosing rheumatic fever and rheumatic heart disease with a diagnostic group in his locality.

We are continuing a policy of avoiding dramatization of the disease and, if possible, false or insecure diagnosis.

Respectfully submitted,

H. H. RIECKER, M.D., *Chairman*
W. B. BLOEMENDAL, M.D.
N. E. CLARKE, M.D.
CARLETON DEAN, M.D.
DOUGLAS DONALD, M.D.
L. FERNALD FOSTER, M.D.
L. PAUL RALPH, M.D.
FRANK VANSCHOICK, M.D.
J. L. WILSON, M.D.
MR. P. C. ANGOVE

ANNUAL REPORT OF PROFESSIONAL LIAISON COMMITTEE—1946-47

The Professional Liaison Committee had no meeting during 1946-47, as no matters or problems within the purview of this committee's activities were referred to it.

Respectfully submitted,

W. D. MAYER, M.D., *Chairman*
C. E. LEMMON, M.D.
H. B. ZEMMER, M.D.

ANNUAL REPORT OF COMMITTEE ON INFECTIOUS DIARRHEA, 1946-47

During the past year two meetings of the entire committee were held in addition to several conferences between the chairman and representatives of the State Health Department. Reference was made to the work of the committee in an editorial appearing in the February issue of the MSMS JOURNAL.

The frequent occurrence throughout the country of epidemics of diarrhea of the newborn calls attention to the seriousness of the situation. No hospital should consider itself immune merely because of a good past record. The great increase in the percentage of hospital deliveries calls for improved hospital facilities and technique if epidemics are to be prevented.

The presence of pediatricians, obstetricians and State Laboratory representatives on the committee provides proper balance. Some progress has been made but much remains to be done.

Respectfully submitted,

R. M. KEMPTON, M.D., *Chairman*
CAMPBELL HARVEY, M.D.
HAROLD HENDERSON, M.D.
W. F. SEELEY, M.D.
G. D. CUMMINGS, M.D.

COMMITTEE REPORTS

ANNUAL REPORT OF SPECIAL COMMITTEE ON UNIFORM FEE SCHEDULE FOR GOVERNMENTAL AGENCIES—1946-47

This Committee was enlarged to ten members so as to permit it to handle more intelligently some of the problems of revision that have been presented.

The entire fee schedule was reviewed in light of the local conditions presented by the State of Michigan and the National problem particularly with reference to the Veterans Fee Schedule. Contacts were made with and discussions were held with various state agencies in an attempt to iron out specific difficulties that had occurred.

All the county societies were contacted with special reference to the mileage fee. Discussions with the Veterans Administration in Washington were held.

Reports of the committee were transmitted to The Council and it is expected that a revised fee schedule will be printed in the near future.

Respectfully submitted,

R. L. NOVY, M.D., *Chairman*
FRANK VANSCHOICK, M.D.
A. B. SMITH, M.D.
E. R. WITWER, M.D.
C. E. TOSHACH, M.D.
ARCH WALLS, M.D.
E. C. TEXTER, M.D.
E. C. BAUMGARTEN, M.D.
R. V. WALKER, M.D.
W. E. JOHNSTON, M.D.

ANNUAL REPORT OF COMMITTEE ON STATE VETERANS AFFAIRS—1946-47

As there was no business brought before this committee, no committee meetings were held.

Respectfully submitted,

L. E. SEVEY, M.D., *Chairman*
G. C. PENBERTHY, M.D., *Vice Chairman*
W. W. BABCOCK, M.D.
C. W. BRAINARD, M.D.
O. A. BRINES, M.D.
WM. BROMME, M.D.
W. C. C. COLE, M.D.
W. W. ELLET, M.D.
H. B. FENECH, M.D.
JAMES FYVIE, M.D.
J. V. FOPEANO, M.D.
R. F. HAUGE, M.D.
S. W. HARTWELL, M.D.
J. E. LUDWICK, M.D.
K. S. MCINTYRE, M.D.
H. C. MITCHELL, M.D.
W. E. NESBITT, M.D.
C. I. OWEN, M.D.
F. H. POWER, M.D.
C. W. REUTTER, M.D.
PAUL SCHRIER, M.D.
J. M. SHELDON, M.D.
R. W. TEED, M.D.
J. M. WELLMAN, M.D.
STUART YNTEMA, M.D.

ANNUAL REPORT OF COMMITTEE ON MICHIGAN HIGH SCHOOL ATHLETIC ACCIDENT BENEFIT FUND—1946-47

The committee appointed to act as liaison between the Michigan State Medical Society and the Michigan High School Athletic Accident Benefit Fund under the Department of Education had two meetings during the year. The background of the formation of this plan and its present activities in detail have been presented to the members of the Society in the April issue of THE JOURNAL. This report was made at the request of the committee in order that there would be a better understanding between the Athletic Benefit Plan and the medical profession. The officers of the plan have under

consideration the adoption of the uniform fee schedule of the State Medical Society, but final action has not been taken.

It is recommended that county medical societies be stimulated to hold meetings on the subject of the High School Athletic Benefit Plan and invite the coaches or athletic directors to present the subject at their meetings, especially in the larger communities. The committee feels that this action can be done on a local scale to a better advantage than recommending that uniform procedures be followed in a county.

The Ingham County Medical Society has already set up a plan for medical attention to high school athletes in conjunction with the Benefit Plan and it is the feeling of the Ingham County Society that such care is a community responsibility.

Respectfully submitted,

S. W. DONALDSON, M.D., *Chairman*
L. FERNALD FOSTER, M.D.
E. R. WITWER, M.D.

ANNUAL REPORT OF COMMITTEE ON NATIONAL EMERGENCY MEDICAL SERVICE—1946-47

The Committee on National Emergency Medical Service was appointed for the year 1946-47 with instruction to "stand by," awaiting submission of such matter as should properly come before it for consideration. Since no such matter has been presented to the committee or to its chairman, no meetings have been held.

Respectfully submitted,

H. F. BECKER, M.D., *Chairman*
W. H. GORDON, M.D.
R. F. HAGUE, M.D.
J. A. RAMSEY, M.D.
S. W. HARTWELL, M.D.
W. G. ELLET, M.D.
W. H. ALEXENDER, M.D.

ANNUAL REPORT OF SPECIAL COMMITTEE TO MEET WITH CONGRESSMAN ENGEL—1946-47

On February 14, 1947, Drs. L. Fernald Foster, C. E. Humphrey, and W. H. Huron, as representatives of the Michigan State Medical Society, attended a dinner in Washington given in honor of Michigan's Congressional delegation. Our delegation performed an outstanding public relations effort in their subsequent contacts with not only Congressman Engel, but with all of our Michigan legislators. An understanding of the difficulties and problems facing our law makers and knowledge regarding proper techniques in making contacts was obtained. This will prove of great benefit to the Michigan State Medical Society.

Respectfully submitted,

E. F. SLADEK, M.D., *Chairman*
O. D. STRYKER, M.D.
R. S. MORRISH, M.D.
P. L. LEDWIDGE, M.D.
L. FERNALD FOSTER, M.D.

ANNUAL REPORT OF INDUSTRIAL STUDY COMMITTEE—1946-47

No meetings of the Industrial Study Committee were held during the year.

The present chairman recommends that this committee be continued since there are a number of questions of importance which might well be studied and worked over at the appropriate time.

Respectfully submitted,

S. W. INSLEY, M.D., *Chairman*
T. K. GRUBER, M.D.
H. B. FENECH, M.D.
L. W. HULL, M.D.

Technical Exhibits

Abbott Laboratories
North Chicago, Illinois

Booth No. C-5

You are most heartily invited to visit the display prepared for this meeting. Abbott Professional Service Representatives will be glad to discuss with you the wide variety of pharmaceutical specialties on display. So! Be sure to visit the Abbott booth.

A. S. Aloe Company
St. Louis, Missouri

Booth No. A-10

The Michigan representatives of the A. S. Aloe Company will welcome their friends at Booth No. A-10 where they will have on display a representative cross section of our complete line of Surgical, Hospital, and Laboratory equipment and supplies. Featured will be a complete line of government surplus instruments available at the present time—especially selected, fully certified instruments at approximately one half the regular cost.

Ames Company, Inc.
Elkhart, Indiana

Booth No. D-6



Clinitest is a tablet method for the detection of urine-sugar. It is a copper-reduction test which develops its own heat within the test tube.

Ames representatives will be glad to discuss the therapeutic indications of the Ames Bile Acid Products, Decholin, Degalol and Cholmodin, with attending physicians.

Armour & Company
Chicago, Illinois

Booth No. B-1

The Armour Laboratories cordially invite members of the Michigan State Medical Society to visit the Armour display in Booth No. B-1. The Armour booklet on "The Thyroid Gland and Clinical Application of Medicinal Thyroid," may be obtained at the Armour booth by those members who have not already received their copies.

Ayerst, McKenna & Harrison, Ltd.
New York, New York

Booth No. E-10

Ayerst products displayed at the Michigan State Medical Annual Session will be:

"Premarin"—an orally active potent preparation of naturally occurring, water-soluble, conjugated estrogens containing sodium estrone sulfate as one of its estrogens.

"Enziflur"—a fluorine-bearing preparation containing vitamins C and D, recommended as an aid in inhibiting dental caries.

Baker Laboratories
Cleveland, Ohio

Booth No. B-4

The Baker display is built around the six-step approach to optimum infant nutrition which leads to the picture of the happy mother and the healthy child. An adjusted protein, two carbohydrates, a modified fat, vitamins, soluble mineral salts and iron, coupled with simplicity of preparation and low cost, provide for complete nutrition and insure co-operation in the home. Baker's Modified Milk, liquid or powder, may be used interchangeably from birth to the end of the bottle-feeding period. May we discuss your infant feeding problem with you?

Bard-Parker Company, Inc.
Danbury, Connecticut

Booth No. C-18

Bard-Parker Rib-Back surgical blades; surgical knife handles; long knife handles for deep surgery; Bard-Parker Formaldehyde Germicide; sterilizing containers; transfer forceps; hematological cases for obtaining bedside blood samples; and a new product, Chlorophenyl, a disinfectant.

Barry Laboratories, Inc.
Detroit, Michigan

Booth No. D-5

Representatives of the Barry Laboratories, Inc., will be on hand to discuss and determine the correct selection of allergens for any physician's individual practice. Custom-made or Rx. desensitization treatment materials which make it possible for the general practitioner and others in specialties to treat as the patient's individual condition directs, as indicated by skin test reactions and history will be demonstrated. The Biological Division will exhibit the latest sterile injectable solutions in ampules and multiple dose vials which are of current interest to the medical profession.

Becton, Dickinson & Company
Rutherford, New Jersey

Booth No. D-12

In Booth No. D-12, Becton, Dickinson & Company will have on display a full line of hypodermic equipment, including some new outfits designed for use in administering continuous caudal and continuous spinal analgesia. The use of vacutainer equipment in a new method of taking blood samples will be demonstrated by their representatives, Mr. V. R. Littlefield and Mr. T. Starling. The exhibit will feature a full line of Ace Bandages, clinical thermometers, B-D Manometers and other diagnostic instruments.

The Borden Company
New York, New York

Booth No. B-18

Protolac, a new especially formulated blend of intact proteins and high protein products derived from animal and vegetable sources is on exhibit at Booth No. B-18. Protolac is supplemented with choline and the amino acid cystine. Protolac is indicated in high protein therapy in conditions requiring increased dietary protein of optimum nutritional value. Likewise exhibited will be our long established products for infant feeding: Biolac, Dryco, Mull-Soy, Merrell-Soule Special Milks, general purpose Klim, and Beta Lactose.

Brewer & Company, Inc.
Worcester, Massachusetts

Booth No. E-12



This exhibit consists of specialties, centering around Thesodate, the original enteric-coated tablet of Theobromine Sodium Acetate, and Luasmin, a combination of Theophylline Sodium Acetate, Phenobarbital and Ephedrine for the treatment of asthma. Also, Brewer Capsules and Ampuls, other specialties and standard pharmaceuticals manufactured by Brewer & Company, Inc., including a complete line of Vitamin preparations for internal use and injection. Gel-ets, the newest mode in oral vitamin therapy, are also featured.

Brooks Appliance Company
Chicago, Illinois

Booth No. D-15

The Brooks Appliance Company will display a complete line of Bandages, First Aid Dressings, proctological Instruments, Needles, Syringes and the newest In Elastic Hosiery.

Mr. W. C. Ayer, Brooks representative, will have charge

TECHNICAL EXHIBITS

and will describe in detail the technique of applying the new Combination Pressure Bandages, Contura plus Pressoplast, which are used in treating of phlebitis and varicose ulcers.

Burroughs Wellcome & Co. (U.S.A.) Inc. Booth No. C-2
New York, New York

Burroughs Wellcome & Co., New York, cordially invite physicians to their exhibit of a representative group of fine pharmaceuticals and chemicals. Of particular interest are Nutragest, the palatable dietary compound containing the amino acids, important minerals, vitamins and carbohydrates; Digoxin, a pure, stable, crystalline glycoside of Digitalis lanata, combining uniform potency with rapidity of action; Wellcome Benzyl Benboate Emulsion, the 24-hour treatment for scabies and pediculosis capita; and LUBA-FAX brand Surgical Lubricant.

Camel Cigarettes
New York, New York

Booth No. A-11

Camel Cigarettes will present a dramatic full color review of their recent medical research on smoking, as well as the details of the nationwide survey showing that "More Doctors Smoke Camels Than Any Other Cigarette." Another panel will illustrate the absorption of nicotine in the respiratory tract. Representatives will be present.

Cameron Heartometer Company
Chicago, Illinois

Booth No. G-22

See the improved Heartometer, a scientific precision instrument for accurately recording systolic and diastolic blood pressures, also furnishing a permanent graphic record of the pulse rate, disturbances of the rhythm, myocardial response, the action of the valves, as well as peripheral vascular circulation. The Heartometer clearly reveals heart disturbances in both early and advanced stages, and is of great value in checking the progress of medication and treatments.

Cameron Surgical Specialty Company **Booth No. D-21**
Chicago, Illinois

See the new Cameron Electro-Surgical Units, Coagulator-Sigmoidoscope, Electro-Diagnosets, Flexible Gastroscopes, Bronchoscopes — Esophagoscopes — Laryngoscopes, Mirrolite, Binocular Spectacle Loupe, Magnifying scope and other specialties.

Carnation Company
Oconomowoc, Wisconsin

Booth No. A-3

You are invited to visit the Carnation Company Booth No. A-3, where you will see an attractive display presenting some interesting information on the various uses of Carnation Vitamin D Evaporated Milk for infant feeding, child feeding, and general diet purposes. The method by which Carnation Milk is generously fortified with Vitamin D—400 U.S.P. Units per reconstituted quart—will be explained. Valuable literature will also be available for distribution.

Ciba Pharmaceutical Products, Inc. **Booth No. E-7**
Summit, New Jersey

Ciba Pharmaceutical Products, Inc., Summit, New Jersey (Booth No. E-7) cordially invite you to visit their exhibit for latest information on Pyribenzamine, the new anti-histaminic compound; Privine, a long-acting nasal vasoconstrictor; Metandren, the potent androgen for sublingual absorption and many others. Representatives in attendance will be ready to answer your questions.

Coca-Cola Company
Atlanta, Georgia

Booth No. A-16

Coca-Cola will be served through the joint courtesy of Coca-Cola Bottling Company of Grand Rapids and The Coca-Cola Company.

Davis & Geck, Inc.
Brooklyn, New York

Booth No. A-8
plus Cinema Room



Davis & Geck, Inc., will display a comprehensive line of sutures specially prepared to fulfill the needs of every surgical technique. Special sutures for intestinal, eye, skin,

tension, thyroid, plastic and thoracic surgery are included.

The D&G Surgical Film Library will present pictures prepared in collaboration with eminent surgical authorities on subjects of interest to those attending the meeting.

Davis & Geck will be represented by Messrs. Fred A. Geck and Merle Elliott.

DePuy Manufacturing Company
Warsaw, Indiana

Booth No. E-20

DePuy will exhibit in Booth E-20 fracture appliances such as the well known dependable Lorenzo Bone Set, the new DePuy Bone Drill and the Can't Drop Screw Driver Set, which holds the bone screws completely around the head. Many other items of interest will be on display. Our booth will be conducted and supervised by Mr. C. F. Klingel, who will be amply able to answer any of your questions. He is a veteran in the field and will handle all of your problems with courtesy and intelligence.

Detroit Creamery Company
Detroit, Michigan

Booth No. D-10



Don't overlook the advantages of Sealtest Quality controls—and our own scientific Sealtest Laboratory supervision. They safeguard the purity and delicious flavor of Sealtest Milk and Ice Cream.

Detroit X-Ray Sales Company
Detroit, Michigan

Booth No. E-17



The Detroit X-Ray Sales Company again features the latest designs in Shockproof X-Ray Equipment. They extend a cordial invitation to visit this exhibit. Of particular interest will be the showing of the latest developments in Photo-Fluorographic Units for hospital admission chest x-rays.

Doho Chemical Corporation
New York, New York

Booth No. C-7

The makers of Auralgan are introducing at this meeting, their sulfa drug preparation O-Tos-Mo-San, indicated in the treatment and control of chronic suppurative ears.

The Doho representatives will be happy to explain, in detail, the workings of these medications. Also to distribute the latest series of three (3) Anatomico-Pathologic Charts of the Ear, in color, suitable for framing.

Eaton Laboratories, Inc.
Norwich, New York

Booth Nos. E-13, E-15

Eaton Laboratories, Inc. will exhibit several pharmaceutical preparations of interest to the physician. Furacin Soluble Dressing containing a new chemo-

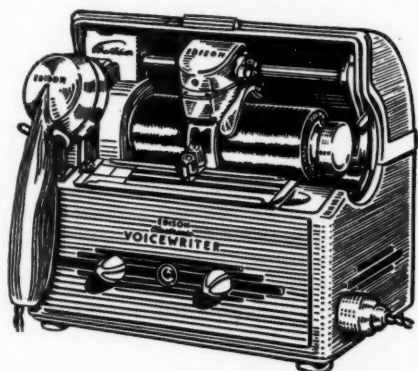
TECHNICAL EXHIBITS

therapeutic agent, Furacin (brand of nitrofurazone), will be exhibited. This compound is a new anti-bacterial agent for the treatment of wound and surface infections. Clinical evaluation throughout the past two and one-half years indicates a wide field of use. Eaton representatives will be pleased to discuss Furacin Soluble Dressing with all physicians. Literature and samples will be available at the Eaton Laboratories, Inc. Exhibit.

The Ediphone Company Grand Rapids, Michigan

Booth No. D-13

The Ediphone Company extends a cordial invitation to visit the display of Ediphone Voicewriting Equipment. See the new Edison Electronic Voicewriter



identified by its Ear-Tuned Jewel-Action; also Miracle Models, manufactured by Edison who invented and perfected sound recording. Stop in for demonstration and to learn how we are helping the medical profession.

Ethicon Suture Laboratories New Brunswick, New Jersey

Booth No. C-16

Ethicon Suture Laboratories presents at Booth No. C-16 a complete line of sutures for every surgical procedure. Of greatest interest is Ethicon's New Bonded Catgut, Tru-Gauged and Tru-Chromicized with up to 30 per cent greater strength. Also exhibited are Ethicon's eyeless Atralog Needles for minimal tissue trauma and Ethicon's Black Braided Silk on spools and in tubes.

H. G. Fischer & Company Chicago, Illinois

Booth No. D-18



Visitors to the 82nd Annual Session of the Michigan State Medical Society are cordially invited to visit the FISCHER Display Booth, to inspect the new units of FISCHER apparatus to be shown, along with the modern trends in shock-proof x-ray and electro-surgical-medical equipment construction. FISCHER units of apparatus are characterized by precision design and convenient, efficient operation. Members of the FISCHER organization will be present at all hours to answer questions and to demonstrate outstanding features of FISCHER equipment and performance. You will be welcome at the FISCHER Booth.

C. B. Fleet Company, Inc. Lynchburg, Virginia

Booth No. C-20

C. B. Fleet Co., Inc. cordially invites you to stop by Booth No. C-20 for a short visit with Mr. James A. Reed, the representative who sees you in your office about once a year. Perhaps there is something about Phospho-Soda (Fleet), the pure, stable, aqueous concentrate of the two U.S.P. Sodium Phosphates, you would like to discuss with him

General Electric X-Ray Corporation Detroit, Michigan

Booth No. A-7

Factual discussions with members of our Michigan sales and service organization during the state meeting will aid you in your future apparatus planning. If you are thinking about new and improved x-ray or electro-medical apparatus, our Layout Engineers can help you with detailed plans and specifications. Possibly an improvement in radiographic end results is indicated. Or you may wish to know how G.E.'s Periodic Inspection and Adjustment Service can help keep your equipment at its maximum operating efficiency. Why not drop in and avail yourself of our wide experience and know-how?

Gerber Products Company Fremont, Michigan

Booth No. B-10



You are invited to visit Gerber's Baby Foods booth. A qualified nutritionist will be in attendance and will be glad to answer questions on Gerber's Baby Cereals, Gerber's Strained Foods and Gerber's Chopped Foods. Samples of Barley Cereal, Cereal Food, and Strained Oatmeal will be available.

Otis E. Glidden & Company, Inc. Evanston, Illinois

Booth No. E-14

Zymenol, a palatable emulsion containing Brewers' Yeast (no live cells) provides effective bowel management, without irritant, habit-forming drugs, dehydrating purgatives, or agents producing artificial bulk. Teaspoonful dosage provides minimum liquid petroleum intake, not likely to interfere with digestive processes or fat soluble vitamin absorption, and avoids leakage.

Zymenol and descriptive literature gratis.

Hack Shoe Company Detroit, Michigan

Booth No. E-8

Correct shoes for men, women and children—including doctors and their families. The new Hack Convalescent Boot, adopted by the Medical Department of the U. S. Army will be on exhibit as well as Hack-O-Pedic Clubfoot and Surgical Shoes.

Hanovia Chemical & Mfg. Company Newark, New Jersey

Booth No. C-4

Black light for diagnostic purposes will be a feature of the exhibit. New self-lighting type ultraviolet lamps for body and orificial treatment will be part of the exhibit, as well as new Safe-T-Aire equipment for the destruction of air-borne bacteria. Courteous and competent representatives will be available to greet you.

J. F. Hartz Company Detroit, Michigan

Booth No. B-20

The J. F. Hartz Company again welcomes the opportunity to exhibit at the MSMS Convention. Hartz representatives Messrs. Anderson, Ferrara, Grand, Kirpluk, MacKinnon, Sawall, and VanHaaften will be on hand to answer any questions relative to Hartz Laboratory Controlled Pharmaceuticals and full line of equipment and instruments.

H. J. Heinz Company Pittsburgh, Pennsylvania

Booth No. D-22

H. J. Heinz Company is displaying Heinz Strained and Senior Foods for infant feeding. Their representatives would appreciate your recommendations regarding these products.

TECHNICAL EXHIBITS

Hoffmann-La Roche, Inc.
Nutley, New Jersey

Booth No. C-10

Roche, the makers of "Medicines of Rare Quality" and vitamins by the ton, will exhibit various prescription specialties, among them Prostigmin, the versatile parasympathetic stimulant; Per-Os-Cillin, the new oral penicillin tablet; Ephynal Acetate, the Roche brand of pure vitamin synthetic vitamin E, and other products of interest to members of the profession.

A staff of representatives will be present to greet and render whatever service possible to visitors at the Roche booth.

Holland-Rantos Company, Inc.
New York, New York

Booth No. E-2

You are cordially invited to visit the Holland-Rantos Booth where on display will be the nationally known and universally used Koromex contraceptive specialties. Besides the new Koromex Set Complete, which is a package combining the necessary items for complete contraceptive technique, will be the new Nylmerate Jelly, introduced only a short time ago and received enthusiastically for the treatment of trichomoniasis and vaginal discharges of a non-specific origin.

Representatives of the company will be on hand to answer all questions. Samples of Nylmerate Jelly and Koromex Jelly will be available, as will copies of the new physician's patient instruction chart.

G. A. Ingram Company **Booth Nos. C-13, C-15, C-17**
Detroit, Michigan

The G. A. Ingram Company of Detroit will exhibit a complete line of surgical instruments in both stainless steel and chrome, as well as all available electrical appliances. Their representatives will be more than pleased to have you call and obtain information on both new and old items.

"The 'Junket' Folks"
Little Falls, New York

Booth No. D-17

In Booth No. D-17, "The 'Junket' Folks," Chr. Hansen's Laboratory, Inc., enlarged photos illustrate the action of the rennet enzyme in forming softer, finer milk curds. Free literature describes dietary uses of rennet-custards in infant, child, convalescent, or post-operative feeding. Attendants on duty. Complimentary package of "Junket" Rennet Powder and "Junket" Rennet Tablets will be presented to physicians who register.

H. W. Kinney & Sons, Inc.
Columbus, Indiana

Booth No. E-1

H. W. Kinney and Sons, Inc. will exhibit Cartose and the Kinney line of nutritional products at Booth No. E-1. Company representatives will be in attendance and will be happy to be of service to any physicians who care to visit at the exhibit.

A. Kuhlman & Company
Detroit, Michigan

Booth Nos. A-14, A-15

The A. Kuhlman & Co. most cordially invites you to visit the display at Booth Nos. A-14 and A-15. You will find on display Stille Surgical Instruments, Hamilton Medical Furniture, A.C.M.I. Cystoscopes, Short Wave Diathermy (short wave diathermy meets requirements of Federal Communication Commission), and many other items of interest to the Physician and Surgeon.

Lea & Febiger
Philadelphia, Pennsylvania

Booth No. B-16

At Booth No. B-16, Lea & Febiger will exhibit among their new works and new editions Gifford's Ocular Therapeutics, Schwartz, Tulipan & Peck's Occupa-

tional Diseases of the Skin, Lewin's Foot and Ankle, Goldberger's Unipolar Lead Electrocardiography, Frohman's Brief Psychotherapy, Joslin's Treatment of Diabetes, Stimson's Common Contagious Diseases, Bell's Pathology, Quiring's The Extremities and The Head, Neck and Trunk, Cushny's Pharmacology and Therapeutics, Wintrobe's Hematology and other standard works.

Lederle Laboratories
New York, New York

Booth No. D-16

Lederle Laboratories will have on display the new Folic Acid products about which there has been so much interest. Among the products to be shown will be Folvite—Lederle's brand of Folic Acid, and Folvron—Folic Acid and Iron, by which both iron-deficiency anemias and macrocytic anemias may be treated.

Libby, McNeill & Libby
Chicago, Illinois

Booth No. D-7



Libby's Vitamin D¹ Fortified Homogenized Evaporated Milk and Libby's Strained and Homogenized Baby Foods are featured at the Libby Booth. Physicians are invited to stop and discuss new findings on the greater availability of iron and ease of digestion of Libby's Council-accepted foods for babies.

Liebel-Flarsheim Company
Cincinnati, Ohio

Booth No. C-8

The Liebel-Flarsheim Company cordially invites you to stop at Booth No. C-8 for examination and demonstration of the Model SW-227 Frequency-Controlled Shortwave Diathermy Unit, as well as our Bovie electrosurgical apparatus. Capable representatives will be on hand at all times to answer your questions about our physical-therapy and electrosurgical equipment.

Eli Lilly & Company
Indianapolis, Indiana

Booth No. B-8

The Lilly exhibit this year features an interesting presentation on the heart and a discussion on cardiac drugs. Many Lilly products are to be on display; representative literature will be available. The attending Lilly medical service representatives will be pleased to assist visiting physicians whenever possible.

J. B. Lippincott Company
Philadelphia, Pennsylvania

Booth A-13

J. B. Lippincott Company, Philadelphia, Pa., presents a complete line of Lippincott Selected Professional Books and Journals.

Be sure to see the current issue of **American Practitioner**—the monthly medical journal designed to shorten the lag between experiment and practice.

Titles of new books and new editions include: Dermatology and Syphilology, Signs and Symptoms—Their Clinical Interpretation, Diagnosis in Daily Practice, Diabetic Care in Pictures, Cardiovascular Diseases, Color Atlas of Hematology, Essentials of Endocrinology, Diseases of the Nose and Throat, Uterine Contractility in Pregnancy.

Medical Gas Division of
Liquid Carbonic Corporation
Chicago, Illinois

Booth No. D-9

The Liquid Carbonic Corporation will exhibit its complete line of Anesthesia, Therapeutic and Resuscitating Gases, as well as Oxygen Therapy equipment in Booth No. D-9.

TECHNICAL EXHIBITS

M & R Dietetic Laboratories, Inc.
Columbus, Ohio

Booth No. E-3

M & R Dietetic Laboratories, Inc., Booth No. E-3, will display Similac, a food for infants deprived either partially or entirely of breast milk. Messrs. R. E. Davis, F. H. Behncke, and L. A. MacDonald will appreciate the opportunity to discuss the merit and suggested application for both the normal and special feeding cases.

McKesson Appliance Company
Toledo, Ohio

Booth No. D-14

Mead Johnson & Company
Evansville, Indiana

Booth Nos. A-4, A-5

Servamus Fidem means "We are keeping the faith." Almost every physician thinks of Mead Johnson & Company as the maker of Dextri-Maltose, Pablum, Oleum Percomorphum, and other infant diet materials—including the new pre-cooked oatmeal cereal, Pabena. But not all physicians are aware of the many helpful services this progressive Company offers physicians. A visit to Booth Nos. A-4 and A-5 will be time well spent.

Medical Arts Surgical Supply Company
Grand Rapids, Michigan

Booth Nos. C-1, C-3

The Medical Arts Surgical Supply of Grand Rapids again will occupy Booth Nos. C-1 and C-3. Their six salesmen from all parts of Michigan will be there to greet you and to show you medical furniture, short waves, x-ray, diagnostic equipment, surgical instruments and pharmaceuticals.

The exhibit will feature equipment of the latest type that will aid you in your daily practice.

Medical Case History Bureau
New York, New York

Booth No. C-19

Simplifying the doctor's history record and book-keeping system with the Info-Dex Record Control System. Maintenance of accurate, informative data on both history and financial records is essential in the modern doctor's practice. The Info-Dex Record Control System helps to keep a constant finger on the physical and financial pulse of the patient. This system correlates information almost automatically for instant reference and research work. Its method of cross-indexing interesting cases according to the disease is unique and exclusive. The Medical Case History Bureau has specialized for many years in record forms for the doctor's office. Their well-informed representative will gladly demonstrate the Info-Dex System and discuss your office problems.

Medical Film Guild
New York, New York

Booth No. A-6 plus Cinema Room

Medical Film Guild through "Medical Films That Teach" presents a refresher course in fundamental medical problems. The films review such subjects as Parkinson's disease, major neuralgias, cervicitis, otolaryngological diseases, contagious diseases, arterial blood pressure, hypothyroidism, industrial medicine. These are available to medical institutions, including projection service at no charge, through grants for postgraduate instruction.

Medical Protective Company
Fort Wayne, Indiana

Booth No. B-2

The most exacting requirements of adequate liability protection are those of the professional liability field. The Medical Protective Company, Specialists in providing protection for professional men, invites you to confer, at their exhibit, with the representatives there. They are thoroughly trained in professional liability underwriting.

Merck & Company, Inc.
Rahway, New Jersey

Booth No. D-11

Since the discovery of Penicillin important strides have been made in the virtually unlimited field of antibiotic chemistry. With increased knowledge concerning Penicillin, it is known that there are at least four individual forms, namely Penicillin G, F, K, and X. It is the G form that is of most importance in medicine today, and it is this form, in high purity and without the presence of the F, K, and X entities, that is supplied as Crystalline Penicillin G Sodium Merck.

Streptomycin, now also well known by the medical profession for its established value in the treatment of certain diseases, as well as its potential value in others, is the result of a research program brilliantly conceived and methodically carried through to a successful conclusion. Merck production of Streptomycin has been steadily increased so that adequate supplies are available for medical needs.

Antibiotics have been chosen by Merck for their MSMS display. Chemical, pharmacological, and medical information is given.

Other fields, medical and nutritional, in which The Merck Research Laboratories are vitally interested, include the Amino Acids, the Vitamins, the Sulfonamides, Choline derivatives, and Anesthetic Agents.

Wm. S. Merrell Company
Cincinnati, Ohio

Booth No. A-2



The Wm. S. Merrell Company, Cincinnati (Booth No. A-2) will feature the new Amino-Concemin. This more complete nutrient tonic designed to speed convalescence, contains the established B vitamins,

the whole B complex from liver, rice bran and yeast, iron and 15 per cent protein hydrolysate. Its rich winey flavor represents an unusual taste accomplishment in a preparation containing liver, iron and amino acids.

Michigan Medical Service
Detroit, Michigan

Booth No. B-5

Largest voluntary prepayment medical-surgical plan in the United States. Charts of progress for past year and from inception to date: (a) Assets and Liabilities; (b) Percentage income paid for administrative costs; (c) Paid Doctors for services rendered; (d) Number services rendered; (e) Incidence of service per year for 1,000 subscribers; (f) Cost per case and cases per 1,000 subscribers; (g) Growth in subscribers and services rendered; (h) Number of cases—Veterans program.

C. V. Mosby Company
St. Louis, Missouri

Booth No. B-6

Physicians attending the Michigan State Medical Society Convention are cordially invited to visit Booth

TECHNICAL EXHIBITS

No. B-6, where a wealth of new medical literature will be displayed by the C. V. Mosby Company.

New books to be shown will include Ackerman-Regato "Cancer," Treiger "Atlas of Cardiovascular Diseases," Clendening-Hashinger "Methods of Diagnosis," Eve "Handbook on Fractures," Wiener "Skin Manifestations of Internal Disorders," Scobee "The Oculorotary Muscles," and Johnstone "Occupational Medicine and Industrial Hygiene." New editions on display will include Top "Communicable Diseases," Crossen "Operative Gynecology," Watson "Hernia," Jeans-Marriott "Infant Nutrition," McCormick "Pathology of Labor, the Puerperium, and the Newborn," and Selling "Synopsis of Neuropsychiatry."

National Dairy Council
Chicago, Illinois

Booth No. E-6

You are cordially invited to visit the National Dairy Council exhibit of health education materials at Booth No. E-6.

Booklets and posters giving timely and authentic nutrition information will be on display. This literature may be used for distribution to patients or for the reception room. Sample material may be requested.

National Drug Company
Philadelphia, Pennsylvania

Booth No. E-4

You are cordially invited to visit our exhibit. Of specific interest will be the newest developments of our Research Laboratories; namely, our Amino Acid products—Aminonate, Aminovite and Protinal.

Also on display will be our time-tested, Council-Accepted biologicals, including the series of multiple antigens for simultaneous immunization.

Wm. R. Nieldelson
Detroit, Michigan

Booth No. C-5

Still the leader of the basal metabolism testers, the Jones "Motor-Basal" will be shown, as will the first successful direct-recording electrocardiograph, the "Cardiotron." Showing for the first time, the new "Profex" Examining Table Model X-Ray for the general practitioner will be on display. This is an ideal unit for the limited space problem.

Ortho Pharmaceutical Corporation
Raritan, New Jersey

Booth No. D-19

Ortho Pharmaceutical Corporation cordially invite you to visit their booth, No. D-19. Their complete line of Gynecic Pharmaceuticals will be on exhibit, including Triple Sulfa Vaginal Cream for Bacterial Vaginitis and Nidoxital for nausea and vomiting of pregnancy. Samples and literature will be available on request.

Parke, Davis & Company
Detroit, Michigan

**Booth Nos. B-7, B-9,
B-11, B-13**

The 1947 Parke, Davis & Co. Exhibit will highlight the Technical Aspects of Benadryl. Demonstrations of the fundamental uses of Radioactive Isotopes in Medical Research and their applicability to the study of the pharmacodynamic action of Benadryl will be depicted. Laboratory animals will be utilized in these daily demonstrations. You are cordially invited to visit this outstanding exhibit.

Pet Milk Company
St. Louis, Missouri

Booth Nos. B-12, B-14

A complete display of material illustrating the time-saving Pet Milk services available to physicians. Spe-

cially trained representatives will be in attendance to give you information about the production of Pet Milk and its use for infant feeding. Miniature cans will be given to physicians visiting the exhibit.

Philip Morris & Company, Ltd., Inc.
New York, New York

Booth No. E-21



Philip Morris & Company will demonstrate the method by which it was found that Philip Morris Cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches on this subject, and problems on the physiological effects of smoking.

Picker X-Ray Corporation
Detroit, Flint, Grand Rapids, Michigan

Booth Nos. D-2, D-4



Picker will exhibit the very popular "Century" diagnostic unit with some postwar improvements; also a complete line of radiographic and fluoroscopic accessories.

Pitman-Moore Company
Indianapolis, Indiana

Booth No. A-9

At Booth No. A-9, the Pitman-Moore display will feature a number of important Council-Accepted biological and pharmaceutical products. Medical service representatives from this area will be on hand to greet their friends in the medical profession, and members of the Pitman-Moore scientific staff will be in attendance to answer technical questions and explain recent scientific advances.

Procter & Gamble Company
Cincinnati, Ohio

Booth No. E-18

In Booth No. E-18, the Procter & Gamble Company offers the first four of a series of time-saving leaflet pads for doctors. These are entitled "Instructions for Routine Care of Acne," "Instructions for Bathing a Patient in Bed," "Instructions for Bathing Your Baby" and "The Hygiene of Pregnancy." Additional leaflet pads are being prepared, designed to save doctors time in answering patients' questions on routine home care. Also displayed will be other samples of service material prepared for the medical profession. Mrs. Christyne Schwab will be in charge of the booth.

Professional Management
Battle Creek, Michigan

Booth No. E-22



Professional Management—"A Michigan Institution with a National Reputation" will be on hand, as usual, with members of the firm available, not only to its hundreds of clients, but to all members of the MSMS for consultation regarding Office Records—Partnership Arrangements—Taxes—Fees and The Business Side of Medical Practice in general.

TECHNICAL EXHIBITS

Radium Emanation Corporation New York, New York

Booth No. E-11

The Radium Emanation Corporation invites you to Booth No. E-11 where we will exhibit a wide variety of instruments and applicators used in modern radium therapy, including permanent and removable Leak-Proof radon seeds. Our representative will be available to explain this equipment and its usage.

Randolph Surgical Supply Company Detroit, Michigan

Booth Nos.
B-15, B-17

Randolph Surgical Supply Company will display the latest developments in new equipment and other items of interest. On hand to greet Randolph's many friends will be Art Rankin, Fred Greenhut and Cliff Randolph.

W. B. Saunders Company Philadelphia, Pennsylvania

Booth No. D-20

W. B. Saunders Company, represented by Mr. Frank Patterson, will exhibit the complete line of their books including Hyman's "Integrated Practice of Medicine," Bockus' "Gastro-enterology," Lyons & Woodhall's "Atlas of Peripheral Nerve Injuries," Rubin's "Diseases of the Chest," Cooke's "Allergy," new editions of Wechsler's "Clinical Neurology," Ranson & Clark's "Anatomy of the Nervous System," Novak's "Gynecological and Obstetrical Pathology," Cecil's "Medicine," DeLee & Greenhill's "Obstetrics," Wharton's "Gynecology and Female Urology," Boyd's "Surgical Pathology," Duncan's "Diseases of Metabolism," McCombs' "Internal Medicine," and many others.

Schering Corporation Bloomfield, New Jersey

Booth No. A-1

The Schering booth will feature the potent oral estrogenic hormone, Estinyl (ethinyl estradiol), the oral progestin, Pranono (anhydrohydroxyprogesterone) and the oral androgen, Oreton-M (methyltestosterone). The well-known parenteral hormones, Oreton (testosterone propionate), Progynon-B (estradiol benzoate), Proluton (progesterone), and Cortata (desoxycorticosterone acetate) will also be displayed. The new effective treatment for ophthalmic infections, Sodium Sulfacetamide Solution 30 per cent will be of interest as will be the clinically safer sulfonamide combination Combisul-TD and the radiographic media Priodax and Neo-Jopax. Schering Professional Service Representatives will be present to welcome physicians' inquiries.

G. D. Searle & Company Chicago, Illinois

Booth No. D-1

Will show a number of products of Searle Research which have contributed so much to the armamentarium of the physician, including Searle Aminophyllin, Metamucil, Ketochol, Floraquin, Diodoquin, Pavatrane, Pavatrane with Phenobarbital, Gonadophysin, and Tetrathione.

Featured will be the new Aminophyllin Suppositories, the Searle brand of Aminophyllin Suppositories, which remain stable at temperatures up to 130° F, but which liquefy readily under conditions of use.

Sharp & Dohme, Inc. Philadelphia, Pennsylvania

Booth No. A-12

Sharp & Dohme extends a cordial welcome to all visitors at Booth No. A-12. New antibiotic preparations including "Prothricin" nasal decongestant and

"Tyroderm," tyrothricin cream are being featured along with "Sulfathalidine" and "Sulfasuxidine," intestinal bacteriostatic agents. "Cremosuxidine," "Lyocyte" Powder, dried human blood cells and "Lyovac" Normal Human Plasma complete the items on exhibit.

Smith, Kline & French Laboratories Philadelphia, Pennsylvania

Booth No. E-5

Eskay's Oralator is featured at this exhibit.

Eskay's Oralator provides a revolutionary method of cough control. Inhaled by mouth, the Oralator's anesthetic-analgesic vapor (2-amino-6-methylheptane) is delivered directly to the nerve endings in the trachea and larynx, where it controls cough within a matter of seconds. Safe and effective, the Oralator is indicated in those types of coughs for which codeine would ordinarily be prescribed. Unlike sedatives and narcotics, however, the Oralator produces no appreciable systemic effects.

Our specially trained professional representatives will be glad to answer questions concerning the possible uses of our products in your practice.

Spencer Incorporated New Haven, Connecticut

Booth No. C-9

Spencer, Incorporated Exhibit—Featuring individually designed supports for abdomen, back and breast. Doctors will be especially interested in these supports for patients who have undergone mastectomy. They will also be interested in the Spencer Spinal Support for patients following cast removal, or as an aid to treatment of protruding disc and other back derangements. Supports for patients with hernia, visceroptosis with symptoms, postoperative needs, obesity, antepartum and postpartum needs are also on display.

E. R. Squibb & Sons New York, New York

Booth No. D-8

Nutrition in the Sick Patient: A scientific exhibit which presents new data on excretion and depletion of nutrients in the hospitalized patients on standard hospital diets; resulting changes in body chemistry; and measures suitable for the prevention of nutritional damage.

Frederick Stearns & Company Division Detroit, Michigan

Booth No. D-3

You are cordially invited to visit the exhibit of Frederick Stearns & Company Division.

Members of our professional staff will be in attendance to discuss such products as Parenamine, Demerol, various Neo-Synephrine products, Fergon, Adnephren, and the complete list of Stearns ethical specialties.

Please register for any samples you may wish sent you.

VanPelt & Brown, Inc. Richmond, Virginia

Booth No. E-16

VanPelt & Brown, Inc., will exhibit a number of our prescription specialties. Of special interest are our products: Elixir and Tablets of Gluco Ferrum with Vitamin B₁ (Hematinic), Barbidonna (Sedative and Anti-Spasmotic), Theobarb (Vasodilator), and Elixir Mandechlor (Urinary Antiseptic). The exhibit will be conducted by Messrs. George J. Hulcher and T. Frank Brown. You are most cordially invited to visit our booth.

Westinghouse Electric Corporation Pittsburgh, Pennsylvania

Booth Nos. C-12
C-14

TECHNICAL EXHIBITS

White Laboratories, Inc.
Newark, New Jersey

Booth No. B-3

White Laboratories, Inc. at Booth No. B-3 present information regarding White's Sulfathiazole Gum—expressly formulated for topical chemotherapy in oropharyngeal infections; White's Otomide—a more effective means of topical chemotherapy in ear infections—and a NEW specialty, White's Mol-Iron Tablets, a new and definite advance in the treatment of iron deficiency anemias. White's ethically promoted vitamin specialties are also featured. You will find a very cordial welcome by White's Medical Service Representatives in charge of the exhibit.

Winthrop Chemical Company, Inc.
New York, New York

Booth No. C-11

WINTHROP CHEMICAL COMPANY, INC., New York (Booth No. C-11) extends a cordial invitation to visit its booth where representatives will be on hand to discuss the latest therapeutic contributions made by this firm. Featured will be Demerol, powerful analgesic, spasmolytic and sedative; Digisidin, crystalline digitoxin, the drug of choice for precise digitalization, and Crystalline Penicillin G in Oil and Wax, "Punctule" for simple, convenient administration of the Roman-sky formula.

Zimmer Manufacturing Company
Warsaw, Indiana

Booth No. E-9

Mr. C. A. Fisher, factory representative, will exhibit a complete line of fracture equipment, including the popular Luck Bone Saw. New items on display for your approval will be, the Moreira Stud-Bolt for hip fractures, Doctor Eggers Contact Splint (slotted bone plate), complete set of New Bone Clamps, Intramedullary fixation Instruments, Adjustable Intertrochanteric Plate and Nail, Threaded Wires and Pins, Moore-Blount Plates and Instruments, New Rubber Cushion Walking Heel, and the Conn Tourniquet.

MEETINGS OF SPECIAL SOCIETIES
AND ALUMNI GROUPS

1. Michigan Society of Anesthetists, Thursday, September 25, Room 322, Pantlind Hotel, 7:00 p.m., dinner. Election of officers and business meeting.
2. Detroit Urological Society, Tuesday, September 23, Room 222, Pantlind Hotel, 7:00 p.m., dinner. Speaker: George H. Ewell, M.D., Madison, Wisconsin—"The Surgical Complications of the Polycystic Kidneys."
3. Michigan Pathological Society, Friday, September 26, Room 222, Pantlind Hotel, beginning at 12:00 Noon and continuing through Friday afternoon and evening and also Saturday morning, September 27. Alan Moritz, M.D., Boston, Mass., and Mr. F. Roland Allaben, LL.B., Grand Rapids, will be the principal guest speakers.
4. Alumni of Northwestern University School of Medicine will meet Wednesday, September 24 at the Peninsular Club, Grand Rapids, 12:30 p.m. The luncheon is being arranged by Cochairman L. S. Griffith, M.D., P.W. Willits, M.D., J. H. Beaton, M.D., H. J. Damstra, M.D., and E. W. Schnoor, M.D., all of Grand Rapids.
5. Alumni Association of Loyola University School of Medicine will meet Tuesday, September 23, Room 322, Pantlind Hotel, 7:00 p.m., dinner.
6. The Medical Assistants Conference—Wednesday, September 24, Schubert Room, Pantlind Hotel, 4:00 p.m., followed by dinner at 6:30 p.m. Secretaries of all MSMS members are cordially invited to attend this informative Conference. No fee.
7. Wayne University Alumni Association "open house" from Tuesday noon to Friday noon, September 23-26—Parlor D., Mezzanine floor, Pantlind Hotel.

Have You Made Your
HOTEL RESERVATIONS?

MICHIGAN STATE MEDICAL SOCIETY

82nd Annual Session

Grand Rapids, September 23-24-25-26, 1947

The reservation blank below is for your convenience in making your hotel reservations in Grand Rapids. Please send your application to J. W. Logie, M.D., Chairman of Housing Committee, c/o Pantlind Hotel, Grand Rapids, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Housing Committee by sharing a room with another registrant.

J. W. Logie, M.D., Chairman, Housing Committee, Michigan State Medical Society Annual Session, c/o Pantlind Hotel, Grand Rapids, Michigan. Please make hotel reservation(s) as indicated below:

.....Single Room(s)

.....Double Room(s) forpersons

.....Twin Bedded Room(s) forpersons

Arriving Septemberhour.....A.M.....P.M.

Leaving Septemberhour.....A.M.....P.M.

(Names and addresses of all applicants including person making reservation).

Name	Address	City	State
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Date	Signature
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Address	City.....
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Michigan State Medical Society

Roster 1947

(Special Memberships are indicated as follows: "E" for Emeritus Members; "L" for Life Members; "R" Retired Members, and "A" for Associate Members; all others are Active Members)

Allegan County

Baker, A. G. Allegan
Brown, Lewis Freeman Otsego
Brunson, Eugene T. Ganges
Burdick, J. G. Allegan
Corkill, C. C. Douglas
Dickinson, C. A. Wayland
Flinn, C. C. Allegan
Hudnutt, Orrin Dean Plainwell

Johnson, E. B. Allegan
Johnson, H. H. Martin
Kromer, R. A. Wayland
Mahan, James E. Allegan
Medill, W. C. Plainwell
Miller, K. C. Saugatuck
Ramseyer, Gladwin E. Plainwell
Rigterink, George H. Hamilton

Rummell, Robert J. Fennville
Stuch, Howard T. Allegan
Stuck, Olin H. Otsego
Ten Pas, Henry W. Hamilton
Van Ness, J. H. Allegan
Van Der Kolk, Bert. Hopkins
Vaughan, W. R. Plainwell

Alpena-Alcona-Presque Isle Counties

Arscott, E. F. Rogers City
Bunting, John W. Alpena
Burkholder, H. J. Alpena
Constantine, Aeneas Harrisville
Foley, Arthur L. Rogers City

Hier, Edward A. Alpena
Jackson, W. F. Rogers City
Kessler, Harold Alpena
Lister, George F. Hillman
Nesbitt, Wm. E. Alpena

O'Donnell, F. J. Alpena
Parmenter, E. S. Rogers City
Pennington, James H. Alpena
Ramsey, J. A. Alpena
Winczewski, Theophile Alpena

Barry County

Clarke, Daniel M. Hastings
Finnie, R. G. Hastings
Gwinn, A. B. Hastings

Harkness, Robert B. (L) Hastings
Keller, Guy C. Hastings
Lathrop, Clarence P. (E) Hastings
Lund, Chester A. E. Middleville

McIntyre, K. S. Hastings
Morris, Edgar T. (L) Nashville
Phelps, Everett L. Hastings

Bay-Arenac-Iosco Counties

Alcorn, Kent. Bay City
Alcorn, Marshall. Bay City
Allen, A. D. Bay City
Andrews, F. T. Bay City
Asline, J. N. Essexville
Austin, Justis. Tawas City
Ballard, W. R. (E) Bay City
Boulton, A. O. (E) Gladwin
Brown, G. M. Bay City
Chapin, Frederick J. Bay City
Connelly, C. J. Bay City
Criswell, R. H. Bay City
Dardas, M. J. Bay City
DeWaele, Paul L. Bay City
Dolbee, Malcolm. Standish
Drummond, Fred. Kawkawlin
Dumond, V. H. Bay City
Fisher, Robert E. Bay City
Foster, L. Fernald. Bay City
Freel, John A. Bay City
Gamble, W. G., Jr. Bay City
Groomes, Charles. Bay City
Grosjean, J. C. Bay City
Gunn, Robert. Bay City
Hagelshaw, G. L. Bay City
Hasty, Earl. Whittemore

Hess, C. L. Bay City
Heuser, Harold H. Bay City
Horowitz, S. Franklin. Bay City
Huckins, E. S. Bay City
Hughes, E. C. Bay City
Husted, F. Pitkin. Bay City
Jacoby, A. H. Bay City
Jens, Otto. Essexville
Johnson, Orlen J. Bay City
Jones, Jerry M. Bay City
Keho, John. Bay City
Kerr, William. (E) Bay City
Kessler, Mana. Bay City
Kessler, Saba. Bay City
Knobloch, Howard. Bay City
Lerner, David. Au Gres
Loftin, Robert. Bay City
MacRae, L. D. Bay City
McDonnell, Walter R. Pinconning
McEwan, J. H. Bay City
MacPhail, Joseph. Bay City
Medvezky, M. J. Bay City
Miller, Edwin C. Bay City
Miller, M. C. Bay City
Mitton, Orland W. East Tawas
Moore, George W. Bay City

Moore, Neal R. Bay City
Mosier, D. J. Bay City
Pearson, Stanley M. Bay City
Perkins, Roy C. Bay City
Reuter, C. W. Bay City
Savory, John. Bay City
Scraftord, Royston Earl. Bay City
Shafer, Harold C. Bay City
Sherman, R. N. Bay City
Smith, J. Campbell. Bay City
Staley, Hugh. Omer
Stinson, W. S. Bay City
Stuart, Alexander A. Bay City
Tarter, Clyde S. Bay City
Timreck, Harold A. Gladwin
Tupper, Virgil L. (R) Bay City
Urmston, Paul R. Bay City
Vail, Harry F. Bay City
Von Haitinger, Kalmon S. Auburn
Warren, E. C. (E) Bay City
Wilcox, J. W. Bay City
Wilson, Thomas G. Bay City
Wittwer, E. A. Bay City
Zaremba, Aloysius J. Bay City
Ziliak, A. L. Bay City

Berrien County

Anderson, H. B. Watervliet
Allen, Robert C. St. Joseph
Anderson, Bertha. St. Joseph
Belsley, Frank K. Benton Harbor
Bjork, Harold. St. Joseph
Bliesmer, A. F. St. Joseph
Brown, F. W. Watervliet
Burrell, H. J. Benton Harbor
Cawthorne, H. J. Benton Harbor
Conybeare, R. C. Benton Harbor
Crowell, Richard. St. Joseph
Dunnington, R. N. Benton Harbor
Eidson, Hazel. Berrien Springs
Emery, Clayton. St. Joseph
Faber, Michael. Benton Harbor
Fattie, G. R., Jr. Niles
Friedman, Morris. New Buffalo
Garrett, Evan L. Niles
Gillette, Clarence H. Niles

Green, Robert. Eau Claire
Gregory, James. Berrien Center
Hanna, P. G. St. Joseph
Harper, Ina. Benton Harbor
Harrison, L. L. Niles
Hart, Russell. Niles
Helkie, W. L. Niles
Henderson, Fred. Niles
Hershey, Noel J. Niles
Huff, H. D. Niles
King, B. B. Benton Harbor
King, Frank, Jr. Benton Harbor
Kling, H. C. Niles
Kok, Harry. Benton Harbor
Lawton, Clare V. Benton Harbor
Leva, John B. Benton Harbor
Miller, E. A. Berrien Springs
Mitchell, Carl A. Benton Harbor
Moore, T. Scott. Niles

Neville, J. William. Benton Harbor
Ozeran, C. J. Benton Harbor
Pritchard, H. M. Niles
Reagan, Robert E. Benton Harbor
Rein, Gerald. Benton Harbor
Rice, Franklin. Niles
Richmond, D. M. St. Joseph
Ruth, J. Griswold. Benton Harbor
Smith, W. A. Berrien Spring
Sowers, Bouton. Benton Harbor
Strayer, J. C. Buchanan
Thorun, D. W. Benton Harbor
Tompkins, C. E. Benton Harbor
Waterson, Roy S. Niles
Westervelt, H. O. Benton Harbor
Winter, Joseph A. St. Joseph
Woodford, H. E. Benton Harbor
Yeomans, T. G. St. Joseph

ROSTER 1947

Branch County

Andrews, Frank A.....Coldwater
Atkinson, A. L.....Quincy
Bailey, J. E.....Coldwater
Beck, Perry C.....Bronson
Bien, W. J.....Coldwater
Culver, Bert W.....Coldwater
Culver, Dean.....Bronson
Eberhart, L. L.....Angola, Ind.

Fraser, R. J.....Coldwater
Heustis, Albert E.....Coldwater
Joerin, William.....Coldwater
Leitch, R. M.....Union City
McLain, R. W.....Jackson
Meier, H. J.....Coldwater
Mooi, H. R.....Coldwater
Olmstead, Kenneth L.....Coldwater

Rees, Kendall B.....Coldwater
Rennell, E. J.....Coldwater
Schultz, Samuel.....Coldwater
Thomas, J. A.....Coldwater
Wade, R. L.....Coldwater
Walton, N. J.....Quincy
Weidner, H. R.....Coldwater
Woods, R. H.....LaSalle, Ill.

Calhoun County

Amos, Norman H.....Battle Creek
Baribeau, R. H.....Battle Creek
Becker, H. F.....Battle Creek
Beuker, Herman.....Marshall
Bodine, Harold R.....Battle Creek
Bonifer, Philip P.....Battle Creek
Brainard, C. W.....Battle Creek
Campbell, Alice.....Albion
Campbell, R. J.....Battle Creek
Capron, Manley J.....Battle Creek
Carney, Ruth C.....Battle Creek
Church, Starr K.....(E) Marshall
Chynoweth, W. R.....Battle Creek
Cooper, J. E.....Battle Creek
Curry, Robert K.....Homer
Dickson, A. R.....Battle Creek
Dodge, Warren M.....Battle Creek
Fairbanks, Stephen.....Albion
Finch, D. L.....Battle Creek
Forsyth, J. F.....Albion
Fraser, R. H.....Battle Creek
Funk, L. D.....Athens
Gething, Joseph W.....Battle Creek
Giddings, A. M.....Battle Creek
Gilfillan, Margery J.....Battle Creek
Gorsline, Clarence S.....Battle Creek
Graubner, F. L.....Marshall
Hansen, Harvey C.....Battle Creek
Haughey, Wilfrid.....Battle Creek
Heald, C. W.....Battle Creek
Henderson, Louis M.....Albion
Henderson, Philip.....Albion
Herzer, Henry A.....Albion
Hibbs, Donald K.....Battle Creek

Hills, C. R.....Battle Creek
Hollands, Robert A.....Battle Creek
Holton, B. G.....Battle Creek
Howard, W. L.....Battle Creek
Hoyt, Aura A.....Battle Creek
Hubly, James W.....Battle Creek
Humphrey, Archie E.....Marshall
Humphrey, Arthur A.....Battle Creek
Jeffrey, J. R.....Battle Creek
Jespersion, Lydia.....Battle Creek
Jones, T. K.....Marshall
Keagle, Leland R.....Battle Creek
Keeler, K. B.....Albion
Kinde, M. R.....Battle Creek
Kingsley, Paul C.....Battle Creek
Knapp, Nettie E.....Battle Creek
Kolvoord, Theodore.....Battle Creek
LaFrance, N. Francis.....Battle Creek
Lam, Francis.....Battle Creek
Levy, Joseph.....Battle Creek
Lewis, W. B.....Battle Creek
Lowe, H. M.....Battle Creek
Lowe, Kenneth H.....Battle Creek
Lowe, Stanley T.....Battle Creek
MacGregor, Archibald E.....Battle Creek
Manni, Lawrence C.....Battle Creek
Meister, F. O.....Battle Creek
Melges, F. J.....Battle Creek
Mercer, C. M.....Battle Creek
Morrison, Donald.....Battle Creek
Moshier, Bertha.....(R) Battle Creek
Mullenmeister, H. F.....Battle Creek
Mustard, Russell.....Battle Creek
Norton, Richard C.....Detroit

Patrick, Gilbert.....Battle Creek
Pearson, Donald J.....Battle Creek
Putnam, W. N.....Battle Creek
Robbert, John.....Battle Creek
Robins, Hugh.....Battle Creek
Rorick, Wilma Weeks.....Battle Creek
Rosenfeld, Joseph E.....Battle Creek
Royer, C. W.....Battle Creek
Schelm, George W.....Battle Creek
Schwarz, Frank W.....Battle Creek
Selmon, Bertha L.....Battle Creek
Sharp, A. D.....Albion
Shipp, L. P.....Battle Creek
Sibilsky, A. Clark.....Battle Creek
Simpson, Robert S.....Battle Creek
Slagle, George W.....Battle Creek
Sleight, James D.....Battle Creek
Stadle, Wendell H.....Battle Creek
Stiefel, Richard.....Battle Creek
Strohmerger, Frank J.....Albion
Tannenholz, Harold S.....Battle Creek
Taylor, Clifford B.....Albion
Toms, Roland E.....Brooklyn, N. Y.
Upson, W. O.....Battle Creek
Van Camp, Elijah.....Battle Creek
Vander Voort, W. V.....Battle Creek
Verity, Lloyd E.....Battle Creek
Walker, Charles S.....Battle Creek
Walters, F. R.....Battle Creek
Wencke, Carl G.....Battle Creek
Winslow, Rollin C.....Battle Creek
Winslow, Sherwood B.....Battle Creek
Zindler, George A.....Battle Creek

Cass County

Adams, U. M.....Marcellus
Clary, R. J.....Dowagiac
Hickman, John.....Dowagiac

Kelsey, James H.....Cassopolis
Loupee, S. L.....Dowagiac
Lyman, W. R.....Dowagiac

Newsome, Otis.....Cassopolis
Pierce, Kenneth C.....Dowagiac
Zwergel, E. H.....Cassopolis

Chippewa-Mackinac Counties

Abbiss, Frederick J.....Sault Ste. Marie
Bandy, F. C.....Sault Ste. Marie
Carr, E. S.....Pickford
Finlayson, D. D.....Sault Ste. Marie
Goldberg, A. H.....Sault Ste. Marie
Hagele, Marie A.....Sault Ste. Marie

Harrington, H. M.....Sault Ste. Marie
Harris, D. M.....Sault Ste. Marie
Howe, D. C.....Sault Ste. Marie
Howe, Gertrude.....Sault Ste. Marie
McBryde, Lyman M.....Sault Ste. Marie
Mertaugh, W. F.....Sault Ste. Marie

Montgomery, B. T.....Sault Ste. Marie
Thompson, T. W.....Sault Ste. Marie
Trapasso, T. G.....Sault Ste. Marie
Wallen, LeRoy J.....Sault Ste. Marie
Willison, C.....(E) Sault Ste. Marie
Yale, I. V.....Sault Ste. Marie

Clinton County

Cook, Bruno.....Westphalia
Elliott, Bruce R.....Ovid
Foo, Charles T.....St. Johns
Frace, Guy H.....St. Johns

Henthorn, A. C.....St. Johns
Ho, Thomas Y.....St. Johns
Luton, F. E.....St. Johns
McWilliams, W. B.....Maple Rapids

Miller, Charles Scott.....Fowler
Russell, Sherwood R.....St. Johns
Stoller, R. Paul.....Fowler
Wahl, George Edward.....St. Johns

Delta-Schoolcraft Counties

Bernier, A. Barro.....Nahma
Benson, G. W.....Escanaba
Boyce, D. H.....Escanaba
Brenner, Ervin J.....Manistique
Carlton, A. J.....Escanaba
Chenoweth, Nancy R.....(E) Escanaba
Defnet, Harry John.....Escanaba

Diamond, J. A.....Gladstone
Frenn, N. J.....Bark River
Fyvie, James.....Manistique
Groos, Harold Quinten.....Escanaba
Groos, Louis P.....Escanaba
Hult, Otto S.....Gladstone
Lemire, Wm. A.....Escanaba

Lindquist, N. L.....Escanaba
McInerney, Thomas A.....Escanaba
Miller, Albert H.....Gladstone
Moll, G. W.....Escanaba
Shaw, George A.....Manistique
Walch, J. J.....Escanaba

Dickinson-Iron Counties

Addison, E. R.....Crystal Falls
Alexander, W. H.....Iron Mountain
Boyce, George H.....Iron Mountain
Browning, James L.....Iron Mountain
Cooper, C. A.....Stambaugh
Fiedling, Wm.....Norway

Frederickson, Geron.....Iron Mountain
Huron, W. H.....Iron Mountain
Irvine, L. E.....Iron River
Kofmehl, Wm. J.....Stambaugh
McEachran, Hugh D.....Iron Mountain
Menzie, Clifford.....Iron Mountain

Palm, E. Theodore.....Crystal Falls
Retallack, R. C.....Iron River
Smith, Donald R.....Iron Mountain
Steinke, Charles G.....Iron Mountain
Wetterstroem, R. G.....Stambaugh

ROSTER 1947

Eaton County

Arner, Fred Levi.....Bellevue
Brown, B. Philip.....Charlotte
Engle, Paul.....Olivet
Goff, S. B.....Eaton Rapids
Hannah, H. W.....Charlotte
Harrod, Gordon.....Grand Ledge

Huber, Chas. D.....Charlotte
Huyck, Stanhope Pier.....Sunfield
Imthun, Edgar F.....Grand Ledge
Meinke, Albert.....Eaton Rapids
Myers, Albert W.....Pottersville
Sevener, Lester G.....Charlotte

Stucky, Geo.....Charlotte
Van Ark, Bert.....Eaton Rapids
Van Ark, Herman.....Eaton Rapids
Whitlock, S. C.....Dimondale
Willits, C. O.....Charlotte

Genesee County

Adams, Chester.....Grand Blanc
Anderson, Harley H.....Mt. Morris
Andrews, N. A. C.....Flushing
Anthony, Geo. E.....Flint
Backus, Glenn R.....Flint
Baird, James.....(E) Flint
Baird, W. C.....Flint
Bald, Frederick W.....Flint
Barbour, Fleming A.....Flint
Baske, Franklin.....Flint
Bateman, L. G.....Flint
Benson, J. C.....Flint
Benson, John C., Jr.....Flint
Bernstein, Eli N.....Flint
Beyer, Damon P.....Clio
Biggar, H. R.....Flint
Bishop, D. L.....Flint
Blakeley, A. C.....Flint
Bogart, Leon M.....Flint
Boles, William P.....Flint
Bonathan, Alvin T.....Flint
Bradley, Robert.....Flint
Brain, R. Gordon.....Flint
Branch, Hira E.....Flint
Brasie, Donald R.....Flint
Briggs, Guy D.....Flint
Bruce, Wm. W.....Swartz Creek
Buchanan, W. Fremont.....Fenton
Burkett, L. V.....Flint
Burnell, Max.....Flint
Burnside, Howard B.....Flint
Caster, E. Wilbur.....Huntington Woods
Chambers, Myrton S.....Flint
Chandler, M. E.....Flint
Charters, John H.....Flint
Clark, Clifford P.....Flint
Clift, M. William.....Flint
Colwell, C. W.....Flint
Connell, J. T.....Flint
Conover, G. V.....Flint
Conover, McClellan.....Flint
Conover, T. S.....Flint
Cook, Henry.....Flint
Covert, F. L.....Gaines
Crane, Harley C.....Flint
Credille, B. A.....Flint
Curry, George.....Flint
Curtin, J. H.....Flint
Cutler, G. Campbell.....Flint
David, T. George.....Flint
Del Zingro, N.....Davison
Denholm, Nan H.....Flint
Dickstein, Bernard.....Flint
Dimond, E. G.....Flint
Dodds, F. E.....Flint
Edgerton, A. C.....Clio
Eichhorn, Ernest.....Flint
Eickhorst, Thomas N.....Flint
Elliott, H. B.....Flint
Ettinger, Ralph D.....Fenton
Evers, J. W.....Flint
Farhat, M. M.....Flint
Fee, Manson G.....Flint
Finkelstein, T.....Flint
Flynn, S. T.....Flint

Foley, S. I.....Flint
Fuller, H. T.....Mt. Morris
Gelenger, Stephen M.....Flint
Gleason, N. Arthur.....Flint
Golden, H. Maxwell.....Flint
Goodfellow, B. T.....Flint
Gorne, S. S.....Flint
Griffin, Ernest P.....Flint
Grover, H. F.....Flint
Guile, Earl.....Flint
Guile, G. S.....Flint
Gundry, G. L.....Grand Blanc
Gutow, I.....Flint
Gutow, J. J.....Flint
Hague, R. F.....Flint
Hall, R. F.....Flint
Halligan, Raymond S.....Flint
Hamady, Ruth.....Flint
Hamilton, A. J.....Flint
Harper, A. W.....Flint
Harper, Homer.....Flint
Hawkins, James E.....Flint
Hays, George A.....Flint
Hiscock, H. H.....Flint
Hooper, Kendall.....Flint
Houston, James.....(L) Swartz Creek
Hubbard, Wm. B.....Flint
Hufton, Wilfred L.....Flint
Jermstad, Robert J.....Flint
Johnson, Arthur H.....Flint
Johnson, Frank D.....Flint
Jones, Lafon.....Flint
Kaleta, Edward.....Flint
Kaufman, Lewis D.....Flint
Knapp, M. S.....(R) Fenton
Knapp, Wm. D.....Flint
Kretchmar, A. H.....Flint
Kurtz, J. J.....Flint
Lambert, L. A.....Flint
Leach, J. L.....Flint
Livesay, Jackson E.....Flint
Logan, G. W.....Flushing
MacDuff, R. B.....Flint
MacGregor, D. M.....Flint
Macksood, Joseph.....Flint
Marsh, H. L.....Flint
Marshall, William H.....Flint
McArthur, A.....Flint
McGarry, R. A.....Flint
McKenna, O. W.....(E) Flint
McLeod, K. W. A.....Flint
Miller, Loren Eugene.....Flint
Miltich, Anthony J.....Flint
Moore, Kenneth B.....Flint
Morriss, Ray S.....Flint
Morrisset, V. H.....Flint
Mosier, Edward C.....Otisville
Odle, Ira.....Flint
Olson, James A.....Detroit
O'Neil, C. H.....(R) Deckerville
Orr, J. Walter.....Flint
Phillips, R. L.....Flint
Pfeifer, A. C.....Mt. Morris
Pratz, O. C.....Flint
Preston, Otto.....Flint

Probert, C. C.....Flint
Randall, H. E.....Flint
Rawlings, J. Mott.....Flint
Reeder, Frank E.....Flint
Reichard, Orill.....Flint
Reid, Wells C.....Goodrich
Reynolds, A. J.....Flint
Richeson, V.....Flint
Rieth, George F.....Flint
Roberts, Floyd A.....Flint
Rowell, Wilfred J.....Flint
Rowley, James A.....Flint
Rulney, Max.....Flint
Rundles, Walter Z.....Flint
Ryneason, W. J.....Fenton
Sandy, K. R.....Flint
Scavarda, Charles J.....Flint
Schiff, B. A.....Flint
Scott, R. D.....Flint
Searles, Karl F.....Flint
Shantz, L. O.....Flint
Sheeran, Daniel H.....Flint
Shipman, Charles W.....Flint
Sirna, Anthony R.....Flint
Sleeman, Blythe R.....Linden
Smith, D. C.....Flint
Smith, E. C.....Flint
Smith, Maurice J.....Flint
Sniderman, Benjamin.....Flint
Snyder, Charles E.....Swartz Creek
Sorkin, Morris L.....Flint
Sorkin, S. S.....Flint
Sparks, Harvey D.....Flint
Stephenson, Robert A.....Flint
Steinman, F. H.....Flint
Stevenson, W. W.....Flint
Streat, R. W.....Flint
Stroup, C. K.....Flint
Sutherland, James K.....Flint
Sutton, George.....Flint
Sutton, M. R.....Flint
Thompson, Alvin.....Flint
Tofteland, Elmer H.....Flint
Treat, D. L.....Flint
Trumble, G. W.....Flint
Vander Slice, David.....Flint
Van Gorder, George.....Davison
Vary, Edwin P.....Flint
Walcott, C. G.....Fenton
Ward, Nell.....Flint
Ware, Frank A.....Flint
Wark, D. R.....Flint
Wentworth, John E.....Flint
Werness, Inga W.....Flint
Westcott, George F.....Goodrich
White, Carl H.....Fenton
White, Herbert.....Flint
Williams, W. S.....Flint
Willoughby, G. L.....Flint
Willoughby, L. L.....Flint
Wills, T. N.....Flint
Woughter, Harold W.....Flint
Wright, D. R.....Flint
Wyman, J. S.....Flint

Gogebic County

Albert, S. G.....Ironwood
Anderson, Chas. E.....Bessemer
Eisele, D. C.....Ironwood
Frack, J. R.....Wakefield
Gertz, M. A.....Ironwood
Gingrich, Wayne A.....Ironwood

Gorrilla, A. C.....Ironwood
Lieberthal, M. J.....Ironwood
Lieberthal, Paul.....Ironwood
Lojaco, Salvatore.....Ironwood
Maccani, Wm. L.....Ironwood
Nezworski, H. T.....Ironwood
O'Brien, A. J.....Ironwood

Pierpont, D. C.....Ironwood
Pinkerton, H. A.....Ironwood
Stevens, Chas. E.....Ironwood
Tressel, H. A.....Wakefield
Urquhart, C. C.....Ironwood
Wacek, W. H.....Ironwood

Grand Traverse-Leelanau-Benzie Counties

Baker, Dorothy M.....Traverse City
Beall, John G.....Traverse City
Berghorst, John.....Traverse City
Bolton Ellis.....Suttons Bay
Brownson, Jay J.....Kingsley
Brownson, Kneale M.....Traverse City
Bushong, B. B.....Traverse City
Eveeef, George S.....Traverse City
Ellis, Claude I.....Suttons Bay

Gallagher, W. H.....Traverse City
Gauntlett, J. W.....Traverse City
Goodrich, Dwight.....Traverse City
Grawn, F. A.....Ypsilanti
Hall, James W.....Traverse City
Hamilton, Earl E.....Traverse City
Haynes, H. B.....Traverse City
Huene, Nevin.....Traverse City
Huston, Russell R.....Elk Rapids

Hyslop, Wm. T.....Traverse iCity
Jerome, Jerome T.....Traverse City
Kyselka, H. B.....Traverse City
Lemen, Chas. E.....Traverse City
Lentz, R. J.....Traverse City
Lossman, R. T.....Traverse City
Manwaring, John T.....Traverse City
Meng, Ralph H.....Traverse City
Mumby, Clinton J.....Traverse City

ROSTER 1947

Nickels, M. M. Traverse City
Osterhagen, H. F. Traverse City
Osterlin, Mark Traverse City
Pike, Donald Traverse City
Power, Frank H. Traverse City
Sheets, R. Philip Traverse City

Sladek, E. F. Traverse City
Stone, Fordyce Beulah
Swartz, F. G. Traverse City
Thacker, Fred R. Frankfort
Thirby, E. L. Traverse City
Trautman, Frederick B. Frankfort
Van Leuven, B. H. Traverse City

Way, Lewis R. Traverse City
Weitz, Harry Traverse City
Whitehouse, John D. Traverse City
Wilcox, Paul H. Traverse City
Zielke, I. H. Traverse City
Zimmerman, J. G. Traverse City

Gratiot-Isabella-Clare Counties

Aldrich, Alfred L. Ithaca
Barstow, D. K. St. Louis
Barstow, Wm. E. St. Louis
Becker, Myron G. Edmore
Budge, M. J. Ithaca
Burch, L. J. Mt. Pleasant
Burt, C. E. Ithaca
Carney, T. J. Alma
Davis, L. L. Mt. Pleasant
Drake, Wilkie M. Breckenridge
DuBois, C. F. Alma

Elliott, L. E. Edmore
Graham, B. J. Alma
Hall, B. C. Pompeii
Hammerberg, Kuno. Clare
Harrington, Wm. L. Mt. Pleasant
Hobbs, A. D. St. Louis
Hyslop, Leland F. Mt. Pleasant
Johnson, P. R. Mt. Pleasant
McArthur, Stewart C. Clare
Miller, S. W. Alma
Oldham, E. S. Breckenridge

Putzig, Louis M. Blanchard
Rondot, E. F. Lake
Rottschaefer, J. L. Alma
Silver, P. P. Vestaburg
Strange, Russell H. Mt. Pleasant
Waggoner, R. L. St. Louis
Wilcox, R. A. Alma
Wilson, Earl C. Harrison
Wolfe, Kenneth P. Alma
Wood, Cornelius B. Mt. Pleasant

Hillsdale County

Bates, Morton Hillsdale
Davis, L. A. Montgomery
Dav, Luther W. Jonesville
Douglas, E. W. Hillsdale
Green, B. F. Hillsdale
Hanke, Geo. R. Ransom

Hodge, C. L. Reading
Hughes, Henry F. (L) Hillsdale
Johnson, C. E. St. Louis, Mo.
Kline, Fred D. Litchfield
MacNeal, John A. Hillsdale
Martindale, E. A. (L) Hillsdale
Mattson, H. F. Hillsdale

McFarland, O. G. North Adams
Miller, Harry C. (L) Hillsdale
Moewch, Geo. F. Hillsdale
Sawyer, Walter W. Hillsdale
Strom, A. W. Hillsdale
Wiggings, I. W. Jonesville

Houghton-Baraga-Keweenaw Counties

Acoks, J. R. Houghton
Aldrich, A. B. Houghton
Aldrich, Addison D. Houghton
Aldrich, Leonard Hancock
Bourland, Phillip D. (L) Calumet
Brewington, George F. (E) Mohawk
Burke, John Hubbell
Conrad, George A. Houghton
Gregg, W. T. S. (E) Calumet
Hillmer, R. E. Beacon Hill
Hosking, Frederick S. Calumet
Janis, A. J. Hancock

King, Wm. T. Ahmeek
Kirtan, Joseph R. W. Calumet
Kolb, F. E. Calumet
LaBine, Alfred Houghton
Levin, Simon Houghton
MacQueen, Donald K. (E) Laurium
Manthei, W. A. Lake Linden
McClure, Robert James Calumet
Murphy, Percy C. Calumet
Quick, James B. (L) Laurium
Roberts, Melvin D. Hancock
Roche, A. C. Calumet

Roche, Andrew M. Calumet
Sarvela, H. L. Hancock
Scott, Benton V. D. Houghton
Sloan, P. S. Houghton
Smith, Charles R. Houghton
Stahr, H. S. Modesta, Calif.
Stern, Isadore D. Houghton
Tinetti, Ernest F. Laurium
Whitmore, R. C. Hancock
Wickliffe, T. P. Calumet
Winkler, Henry J. L'Anse
Wood, Neal N. Calumet

Huron County

Dixon, R. C. Pigeon
Gettle, Roy R. Kinde
Henderson, J. Bates Sebawaing
Herrington, Charles I. Bad Axe

Herrington, Willet J. Bad Axe
Holdship, Wm. B. Uby
Morden, Charles B. Bad Axe
Oakes, C. W. Harbor Beach

Ritsema, John Sebawaing
Scheurer, C. Pigeon
Thumme, Harrison F. Sebawaing
Weiss, Arno W. Kinde

Ingham County

Altland, J. K. Lansing
Bartholomew, Henry S. (R) Harbor Beach
Bauer, Theodore I. Lansing
Behen, Wm. C. Lansing
Bellinger, E. G. Lansing
Black, Charles E. Williamston
Black, Gertrude Williamston
Bobczynski, Wilhelmina East Lansing
Bradford, C. W. Lansing
Bredakey, Robert S. Lansing
Briede, Paul C. Lansing
Brown, F. W., Jr. Lansing
Brubaker, Earl Lansing
Brucker, Karl B. Lansing
Burhans, Robert Lansing
Calomeni, Anthony D. Detroit
Cameron, W. J. Lansing
Carr, E. I. Lansing
Christian, L. G. Lansing
Clark, William E. Mason
Clarke, Emilie Arnold Lansing
Clinton, George R. Mason
Cook, R. J. Lansing
Cope, H. E. Lansing
Corneliuson, Goldie B. Lansing
Cowan, John A. Lansing
Cross, Frank S. Lansing
Cummings, G. D. Lansing
Dart, Dorothy Lansing
Dean, Carleton Lansing
DeKleine, William Lansing
DeVries, C. F. Lansing
Doyle, C. P. (E) Lansing
Drolett, Fred J. Lansing
Drolett, Lawrence Lansing
Dunn, F. C. (L) Lansing
Dunn, F. M. Lansing
Ellis, Bertha Lansing

Ellis, C. W. Lansing
Elmendorf, Edw. N. Lansing
English, Lena East Lansing
Feeney, Kenneth J. Lansing
Finch, Russell L. Lansing
Folkers, Leonard M. East Lansing
Fosget, W. W. Lansing
Foust, E. H. Lansing
Galbraith, Dugald A. Lansing
Gardner, C. B. Lansing
Goldner, R. E. Lansing
Hackman, Pearl Lansing
Harris, Dean W. Lansing
Harris, Herbert W. Lansing
Harrison, W. H. Lansing
Harrold, J. F. Lansing
Hart, L. C. Lansing
Heald, Gordon H. East Lansing
Heckert, Frank B. Lansing
Hendren, Owen S. Birmingham
Henry L. L. Lansing
Hermes, Ed J. Lansing
Himmelberger, R. J. Lansing
Hodges, Kenneth P. Lansing
Holland, Charles F. East Lansing
Huggett, Clare C. Lansing
Huntley, Fred M. Lansing
Hurth, M. S. Lansing
Isbister, John L. Lansing
Johnson, K. H. Lansing
Jones, Francis A., Sr. Lansing
Jones, Francis, Jr. Lansing
Kahn, David Lansing
Kalmbach, R. E. Lansing
Keim, C. D. Lansing
Kent, Edith Hall Lansing
Kent, Herbert K. Lansing
Kenyon, Fanny H. Lansing

Klunzinger, Willard R. Lansing
Lanting, Helen E. East Lansing
Lanting, Roelof Lansing
LeDuc, Don M. Lansing
Ley, Wilfred Lansing
Loree, Maurice C. Lansing
Lucas, T. A. Lansing
Ludlum, L. C. Lansing
Markuson, Kenneth E. East Lansing
Martin, Wayne O. Lansing
McConnell, E. G. (R) Lansing
McCorvie, C. Ray East Lansing
McCoy, Earl M. Grand Ledge
McCrumb, R. R. Lansing
McElmurry, Leland R. Lansing
McGillicuddy, Oliver B. Lansing
McGillicuddy, R. J. Lansing
McIntyre, J. E. Lansing
McNamara, B. Edward Lansing
McNamara, William E. Lansing
Meade, Wm. H. Lansing
Mercer, Walter E. East Lansing
Miller, H. A. Lansing
Morrison, C. V. Lansing
Morrow, R. J. Lansing
Myers, Victor C. East Lansing
Ochsner, P. J. Lansing
O'Sullivan, Gertrude (E) Mason
Pinkham, R. A. Lansing
Place, Edwin H. Lansing
Ponton, J. Mason
Prall, H. J. Lansing
Randall, O. M. Lansing
Rector, Frank L. Ann Arbor
Richards, F. D. DeWitt
Richardson, M. L. Lansing
Robson, Edmund J. East Lansing
Rowe, R. E. East Lansing

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Rozan, J. S. Lansing
Rozan, M. M. Lansing
Russell, Claude V. (R) Northport
Sander, John F. East Lansing
Sanford, Thomas M. (E) Lansing
Schoff, Charles Williamston
Seger, Fred L. (L) Lansing
Shaw, Milton Lansing
Sherman, G. A. East Lansing
Sichler, Harper G. Lansing
Silverman, Irving E. Lansing
Smith, Anthony V. Mason
Snell, D. M. Lansing

Snyder, LeMoyne Lansing
Snyder, Ruth Ellis Lansing
Spaulding, Thomas Lansing
Spencer, Perry Lansing
Stanka, Andrew G. Grand Ledge
Stanley, Arthur L. Lansing
Steiner, S. D. Lansing
Stiles, Frank Lansing
Strauss, P. C. Lansing
Stringer, C. J. Lansing
Swartz, Frederick C. Lansing
Tamblyn, F. W. Lansing
Toothaker, Kenneth Lansing

Trescott, Robert F. Lansing
Trimby, Robert H. Lansing
Troost, F. L. Holt
Vander Zalm, T. P. Lansing
Venier, Joseph Lansing
Wadley, R. Lansing
Webb, Roy O. Okemos
Welch, William H. Ann Arbor
Wellman, John W. Lansing
Wilensky, Thomas Lansing
Wiley, Harold W. Lansing
Willson, Howard S. Lansing
Wilson, Harry A. Lansing

Ionia-Montcalm Counties

Bird, Wm. L. Greenville
Bracey, L. E. Sheridan
Bunce, E. P. Trufant
Bunce, Leo Trufant
Cook, George Harvey Ionia
Dunkin, Lloyd S. Greenville
Fleming, J. C. Pewamo
Fox, Harold M. Portland
Geib, O. P. Carson City
Hansen, Carl M. Stanton
Hansen, M. M. Greenville

Haskett, Robert H. Northville
Hoffs, M. A. Lake Odessa
Holland, A. E. Belding
Kelsey, L. E. Lakeview
Lilly, Isaac S. Stanton
Marston, L. L. Lakeview
McCann, John J. Ionia
Michmerhuizen, Robert E. Lake Odessa
Murawa, V. J. Ionia
Pankhurst, C. T. Ionia
Peabody, C. H. Lake Odessa
Reid, Harold E. Belding

Rice, Robert E. Greenville
Robertson, P. C. Ionia
Seidel, Karl E. Ionia
Slade, H. G. Ionia
Slagh, Milton E. Saranac
Snider, J. D. Ionia
Socha, Edmund S. Ionia
Swift, E. R. Lakeview
VanLoo, J. A. Belding
Weaver, Harry B. Greenville
Whitten, R. R. Ionia

Jackson County

Adams, D. C. Jackson
Ahrnheim, J. H. Jackson
Alter, R. H. Jackson
Anderson, W. B. Jackson
Appel, S. Jackson
Baker, G. M. Parma
Bartholic, F. W. Homer
Beckwith, S. A. Stockbridge
Bindshelder, Buell S. Jackson
Bullen, G. R. Jackson
Chabut, H. M. Jackson
Clarke, C. S. Jackson
Cochrane, Wayne A. Jackson
Cooley, Randall M. Jackson
Corley, C. Jackson
Corley, Ennis Jackson
Cox, Ferdinand Jackson
Culver, Guy D. Stockbridge
DeMay, C. E. Jackson
DeMay, John Jackson
Deming, Richard C. Jackson
Dengler, C. R. Jackson
Durocher, Normand E. Jackson
Edmonds, J. M. Horton
Enders, W. H. Jackson
Filip, H. K. Jackson
Finton, Walter L. Jackson
Fisher, Joseph V. Chelsea
Foust, W. L. Grass Lake
Glover, H. G. (R) Jackson
Gordon, D. L. Jackson
Greenbaum, Harry Jackson
Growt, Bowers H. Addison
Habenicht, Hilda Jackson
Hackett, T. E. Jackson
Hackett, Thomas L. Jackson

Hanft, Cyril F. Springport
Hanna, R. J. Jackson
Hardie, G. C. Jackson
Harris, Lester J. Jackson
Hicks, Glen C. Jackson
Holst, John B. Jackson
Holstein, A. P. Manchester
Hurley, H. L. Jackson
Keefer, A. H. Concord
Kudner, Don F. Jackson
Landron, Daniel Michigan Center
Lathrop, Wm. W. (E) Jackson
Leahy, E. O. Jackson
Lenz, C. R. Jackson
Leonard, Clyde A. Jackson
Lewis, E. F. Jackson
Linden, V. E. Jackson
Ludwick, J. E. Jackson
McGarvey, W. E. Jackson
McLaughlin, M. J. Jackson
McLauthlin, Herbert B. Jackson
Meads, J. B. Jackson
Miller, J. L. Jackson
Miller, Samuel L. Jackson
Munro, C. D. Jackson
Munro, James E. Jackson
Munro, Nathan Jackson
Murphy, B. M. Jackson
Newton, R. E. Jackson
Olesky, S. Jackson
O'Meara, James J. Jackson
Otis, Grant L. Jackson
Payne, Andrew K. Jackson
Phillips, G. H. Jackson
Pier, C. T. Brooklyn
Porter, H. W. Jackson
Pray, Frank F. Jackson

Pray, George R. Jackson
Quirk, Edmund J. Chelsea
Ransom, F. G. Jackson
Rice, John W. Jackson
Riley, Philip A. Jackson
Roberts, Arthur J. (E) Detroit
Sargent, Leland E. Jackson
Sautter, William Horton
Schmidt, T. E. Jackson
Scott, John A. Jackson
Shaeffer, A. M. Jackson
Sill, Henry W. Jackson
Sirhal, Alfred M. Brooklyn
Smith, Dean W. Jackson
Southwick, W. A. Springport
Stewart, L. L. Jackson
Stone, Ethon L. Jackson
Sugar, Samuel Jackson
Susskind, M. V. Jackson
Tate, Cecil E. Jackson
Taylor, Ross V. Jackson
Thayer, E. A. Jackson
Thalner, L. F. Jackson
Thompson, John R. Manchester
Thompson, Tom Jackson
Torwick, E. T. Jackson
Townsend, J. W. Vandercook Lake
Van Schoick, J. D. Hanover
Van Schoick, Frank Jackson
Van Wagnen, F. I. Jackson
Vivirski, Edward E. Jackson
Wallace, Warren S. Jackson
Wholihan, John W. Jackson
Wickham, W. A. Jackson
Wilson, N. D. Jackson
Winter, G. E. Jackson

Kalamazoo County

Aach, Hugo Kalamazoo
Andersen, Glenn C. Kalamazoo
Alexander, C. A. Kalamazoo
Andrews, Sherman Kalamazoo
Armstrong, Robert J. Kalamazoo
Banner, Lawrence R. Kalamazoo
Barak, Herbert G. Kalamazoo
Barnebee, J. W. Kalamazoo
Behan, Gerald Kalamazoo
Benjamin, Margaret Kalamazoo
Bennett, Charles L. Kalamazoo
Bennett, Keith Kalamazoo
Berry, J. F. Kalamazoo
Birch, William Kalamazoo
Bodmer, H. C. Kalamazoo
Borgman, Wallace Kalamazoo
Boys, C. E. Kalamazoo
Brown, I. W. Kalamazoo
Caldwell, Geo. H. (R) Kalamazoo
Cobb, Horace R. Kalamazoo
Cook, R. G. Kalamazoo
Crane, W. B. Kalamazoo
Crawford, Kenneth Kalamazoo
Dahlstrom, Doris Kalamazoo
Dana, Robert L. Kalamazoo
DeGroat, Albert Kalamazoo
DeBleyker, Walter Kalamazoo
DeWitt, L. H. (R) Kalamazoo
De Witt, Norman Kalamazoo

Dowd, B. J. Kalamazoo
Doyle, F. M. Kalamazoo
Ertell, Wm. Francis Kalamazoo
Farwell, Byron E. Kalamazoo
Fast, R. B. Kalamazoo
Fath, August F. Kalamazoo
Fopeano, John V. Kalamazoo
Fulkerson, C. B. Kalamazoo
Fuller, R. T. (L) Kalamazoo
Fuller, Paul Kalamazoo
Gerstner, Louis Kalamazoo
Gilding, Joseph Vicksburg
Goodhue, Lolita Kalamazoo
Grant, Frederick E. Kalamazoo
Green, William Kalamazoo
Gregg, Sherman Kalamazoo
Hayner, R. A. Kalamazoo
Heersma, H. S. Kalamazoo
Hildreth, R. C. Kalamazoo
Hodgeman, Albert B. Kalamazoo
Hoebeke, William G. Kalamazoo
Holder, Charles Kalamazoo
Howard, H. S. Kalamazoo
Howard, W. H. Kalamazoo
Hubbell, R. J. Kalamazoo
Huyser, William C. Kalamazoo
Irwin, William D. Kalamazoo
Jackson, Howard C. Kalamazoo
Jackson, John B. Kalamazoo

Jennings, W. O. Kalamazoo
Kavanaugh, Wm. R. Kalamazoo
Kenzie, W. N. (L) Richland
Kilgore, Robert Nelson Kalamazoo
Klerk, W. J. Kalamazoo
Koestner, Paul Kalamazoo
Lambert, R. H. Kalamazoo
Lavender, Howard Kalamazoo
Light, Richard Upjohn Kalamazoo
Light, S. Rudolph Kalamazoo
Littig, John Kalamazoo
MacGregor, J. R. Kalamazoo
Machin, H. A. Kalamazoo
Malone, James G. Kalamazoo
Margolis, Frederick J. Kalamazoo
Marshall, Don Kalamazoo
Marshall, Evelyn W. Kalamazoo
Marshall, William P. Kalamazoo
McCarthy, J. S. Kalamazoo
McIntyre, Charles H. Los Angeles, Calif.
McNabb, A. A. Watervliet
Moe, Carl Rex Kalamazoo
Morter, Roy A. Kalamazoo
Nell, Edward R. Kalamazoo
Nibbelink, Benjamin Kalamazoo
Olney, H. E. Leonidas
Patmos, Martin Kalamazoo
Pearson, Edwin O. Kalamazoo
Peelen, J. W. Kalamazoo

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Peelen, Matthew.....	Kalamazoo
Perry, Clifton.....	Kalamazoo
Prentice, Hazel R.....	Kalamazoo
Prothro, W. B.....	Kalamazoo
Pullon, A. E.....	Kalamazoo
Rasmussen, Leo.....	Visksburg
Rigterink, G. H.....	Kalamazoo
Rigterink, H. A. (L).....	Kalamazoo
Rockwell, Donald C.....	Kalamazoo
Rogers, T. P.....	Kalamazoo
Russell, Stuart.....	Kalamazoo
Ryan, F. C.....	Kalamazoo
Sage, E. D.....	Kalamazoo
Scholten, D. J.....	Kalamazoo

Scholten, Wm.....	Kalamazoo
Schrier, C. M.....	Kalamazoo
Schrier, Paul.....	Kalamazoo
Schrier, Thomas.....	Comstock
Scott, Wm. A.....	Kalamazoo
Shackleton, Wm. E. (R).....	Kalamazoo
Shook, R. W.....	Kalamazoo
Siemsen, W. J.....	Kalamazoo
Simpson, B. W.....	Kalamazoo
Sick, W. E.....	Kalamazoo
Snyder, Roscoe F. (L).....	Kalamazoo
Sofen, Morris B.....	Kalamazoo
Southworth, M. N.....	Schoolcraft
Stiller, A. F.....	Kalamazoo

Stryker, Homer H.....	Kalamazoo
Treshler, H. J.....	Oshkemo
Upjohn, E. Gifford.....	Kalamazoo
Upjohn, L. N.....	Kalamazoo
Van Urk, Thomas.....	Kalamazoo
Verhage, Martin D.....	Kalamazoo
Volderauer, John C.....	Kalamazoo
Westcott, L. E.....	Kalamazoo
Williamson, Edwin M.....	Kalamazoo
Wilbur, E. P.....	Kalamazoo
Youngs, A. S.....	Kalamazoo
Youngs, C. A.....	Kalamazoo
Zolen, Margaret.....	Kalamazoo

Kent County

Adams, F. A.....	Grand Rapids
Aitken, George T.....	Grand Rapids
Albers, G. Donald.....	Grand Rapids
Alfenito, Felix S.....	Grand Rapids
Allen, R. V.....	Grand Rapids
Avery, Noyes L.....	Grand Rapids
Baert, Geo. H.....(E)	Grand Rapids
Baker, Abel J.....	Grand Rapids
Ballard, M. S.....	Grand Rapids
Balyeat, Gordon W.....	Grand Rapids
Barris, Ralph W.....	Grand Rapids
Beaton, James H.....	Grand Rapids
Beeman, Carl B.....	Grand Rapids
Beeman, C. E.....	Grand Rapids
Beets, W. Clarence.....	Grand Rapids
Bell, Charles M.....	Grand Rapids
Benjamin, Howard G.....	Grand Rapids
Benson, Roland R.....	Grand Rapids
Bergsma, Stuart.....	Grand Rapids
Billings, Elton P.....(L)	Grand Rapids
Blackburn, Henry M.....	Grand Rapids
Bloxson, Paul W.....	Grand Rapids
Boelkins, Richard C.....	Grand Rapids
Boet, F. A.....	Grand Rapids
Boet, John.....	Grand Rapids
Boldyreff, Ephraim.....	Grand Rapids
Bosch, L. C.....	Grand Rapids
Botting, A. J.....	Byron Center
Brace, Fred.....	Grand Rapids
Brayman, C. W.....(L)	Cedar Springs
Brink, Russell.....	Grand Rapids
Brook, Jacob D.....(L)	Grandville
Browning, Eugene C.....	Grand Rapids
Brotherhood, J. S.....	Grand Rapids
Bruggers, Lawrence.....	Grand Rapids
Buesing, O. R.....	Grand Rapids
Buist, S. J.....	Grand Rapids
Bull, Frank L.....	Sparta
Burleson, John S.....	Grand Rapids
Burling, Wesley M.....	Grand Rapids
Burroughs, Frank.....	Grandville
Butler, Wm. J.....	Grand Rapids
Byers, Earl J.....	Grand Rapids
Byrd, Mary Lou.....	Grand Rapids
Campbell, Alex. M.....(E)	Grand Rapids
Chamberlain, L. H.....(L)	Grand Rapids
Chandler, Donald.....	Grand Rapids
Clawson, Carroll K.....	Grand Rapids
Claytor, R. W.....	Grand Rapids
Collisi, Harrison S.....	Cleveland, Ohio
Colvin, W. G.....	Grand Rapids
Corbus, Burton R.....	Grand Rapids
Crane, Charles V.....	Grand Rapids
Crane, Harold D.....	Grand Rapids
Cuncannan, M. E.....	Grand Rapids
Currier, F. P.....	Grand Rapids
Dales, Ernest W.....	Grand Rapids
Damstra, H. J.....	Grand Rapids
Davis, D. B.....	Grand Rapids
Dawson, Douglas.....	Grand Rapids
Dean, Alfred W.....	Grand Rapids
DeBoer, Clarence J.....	Ann Arbor
DeBoer, Guy Wm.....	Grand Rapids
DeMaagd, Gerald.....	Rockford
DeMol, Richard J.....	Grand Rapids
Denham, R. H.....	Grand Rapids
Denham, Robert H., Jr.....	Ann Arbor
DePree, Isla G.....	Grand Rapids
DePree, Joseph.....	Grand Rapids
Deurloo, H. W.....	Grand Rapids
DeVel, Leon.....	Grand Rapids
DeVries, Daniel.....	Grand Rapids
DeWar, M. M.....	Grand Rapids
Dewey, Kent A.....	Grand Rapids
DeYoung, Thies.....	Sparta
Dick, Mark W.....	Grand Rapids
Diskey, Donald.....	Grand Rapids
Dixon, Willis L.....	Grand Rapids
Doezema, Edward R.....	Grand Rapids
Doran, Frank L.....	Grand Rapids
Droste, James C.....	Grand Rapids
DuBois, Wm. J.....(L)	Grand Rapids
Ducey, Edward F.....	Grand Rapids
Duiker, Henry.....	Grand Rapids

Eaton, Robert M.....	Grand Rapids
Eggleston, H. R.....	Grand Rapids
Fahlund, George.....	Grand Rapids
Failing, John F.....	Grand Rapids
Fannaff, Fred L.....	Grand Rapids
Farber, Charles E.....	Grand Rapids
Faust, L. W.....	Grand Rapids
Fellows, Kenneth E.....	Grand Rapids
Ferguson, Lynn A.....	Grand Rapids
Ferguson, Ward S.....	Grand Rapids
Ferrand L.....	Rockford
Fitts, Ralph L.....	Grand Rapids
Flynn, J. D.....	Grand Rapids
Foshee, J. C.....	Grand Rapids
Frantz, Charles H.....	Grand Rapids
Freiswyk, Melvin J.....	Grand Rapids
Freyling, Robert.....	Brooklyn, N. Y.
Fuller, E. H.....	Grand Rapids
Gamm, Kenneth.....	Grand Rapids
Gibbs, F. F.....	Grand Rapids
Gilbert, R. H.....	Grand Rapids
Gillett, Frederick S.....	Grand Rapids
Grant, Lee O.....	Grand Rapids
Grant, Lucile R.....	Grand Rapids
Grass, Edward J.....	Grand Rapids
Graybiel, George.....	Caledonia
Griffith, L. S.....	Grand Rapids
Hagerman, D. B.....	Grand Rapids
Hammond, T. W.....(R)	Grand Rapids
Hayes, L. W.....	Howard City
Hayes, Lawrence, Jr.....	Howard City
Heetderks, Dewey.....	Grand Rapids
Henry, James, Jr.....	Grand Rapids
Herrick, Ruth.....	Grand Rapids
Hill, A. Morgan.....	Grand Rapids
Hodgen, J. T.....	Grand Rapids
Holcomb, J. W.....	Grand Rapids
Holdsorth, M. J.....	Grand Rapids
Holkeboer, Henry D.....	Grand Rapids
Hollander, Stephen.....	Grand Rapids
House, Glenn W.....	Grand Rapids
Hufford, A. R.....	Grand Rapids
Huderman, Edward.....	Grand Rapids
Hyland, W. A.....	Grand Rapids
Jack, William.....	Chicago, Ill.
Jaracz, W. J.....	Grand Rapids
Jarvis, Charles.....	Grand Rapids
Jellena, J. F.....	Grand Rapids
Jones, H. C.....	Grand Rapids
Kelly, Edward F.....	Grand Rapids
Kelly, Robert E.....	Grand Rapids
Kemmer, Thomas R.....	Grand Rapids
Kendall, Eugene L.....	Grand Rapids
Klaus, C. D.....	Grand Rapids
Kniskern, P. W.....	Grand Rapids
Kooistra, Henry P.....	Grand Rapids
Koon, William D.....	Detroit
Kremer, John.....(L)	Grand Rapids
Kreulen, H. J.....	Grand Rapids
Kriekard, P. J.....(L)	Grand Rapids
Krupp, C. G.....	Grand Rapids
Laird, Robert G.....	Grand Rapids
Lamb, George F.....(L)	Grand Rapids
Lanning, N. E.....	Grand Rapids
Lentini, Joseph R.....	Grand Rapids
Le Roy, Simeon.....	Grand Rapids
Lieffers, Harry.....	Grand Rapids
Lindenfeld, Frederick H.....	Ann Arbor
List, Carl F.....	Grand Rapids
Logie, James W.....	Grand Rapids
Loranger, Guy L.....	Grand Rapids
Lyman, William D.....(L)	Grand Rapids
MacDonald, Allen.....	Augusta
MacDonell, James A.....	Lowell
Marsh, John P.....	Grand Rapids
Maurits, Reuben.....(E)	Grand Rapids
Maynard, Mason S.....	Grand Rapids
McCandiss, Robert.....	Grand Rapids
McCormick, John.....	Grand Rapids
McDougal, Wm. J.....	Grand Rapids
McKenna, J. L.....	Grand Rapids
McKinlay, L. M.....	Grand Rapids
McRae, John H.....	Grand Rapids
Mehney, Gayle H.....	Grand Rapids
Miller, J. Duane.....	Grand Rapids

Miller, John J.....	Marne
Mitchell, H. C.....	Grand Rapids
Mitchell, W. B.....	Grand Rapids
Moen, Cornetta G.....	Grand Rapids
Moleski, Joseph.....	Grand Rapids
Moleski, Stanley L.....	Grand Rapids
Moll, Arthur M.....	Grand Rapids
Morey, Edward C.....	Grand Rapids
Mouw, Dirk.....	Grand Rapids
Mulder, J. D.....	Grand Rapids
Murphy, M. J.....	Grand Rapids
Nelson, A. R.....	San Francisco, Calif.
Noordewier, Albert.....(L)	Grand Rapids
Northouse, Peter B.....	Grand Rapids
Notier, Victor.....	Grand Rapids
Oliver, W. W.....	Grand Rapids
Olson, John R.....	Grand Rapids
Osborn, Howard.....	Grand Rapids
Patterson, P. Wilfred.....	Grand Rapids
Payne, C. Allen.....	Grand Rapids
Pearson, Glenn A.....	Grand Rapids
Pedden, J. R., Jr.....	Grand Rapids
Posthuma, A. E.....	San Antonio, Texas
Posthuma, Millard.....	Ann Arbor
Postma, Edward Y.....	Grand Rapids
Pyle, Henry J.....	Grand Rapids
Ragsdale, L. V.....	Grand Rapids
Ralph, L. Paul.....	Grand Rapids
Reed, Torrance.....	Grand Rapids
Rigterink, J. W.....	Grand Rapids
Riley, G. L.....	Grand Rapids
Robb, Charles S.....	Grand Rapids
Roberts, Mortimer E.....(E)	Grand Rapids
Robinson, Harold C.....	Grand Rapids
Rodgers, William L.....	Grand Rapids
Rosenzweig, Leonard.....	Grand Rapids
Roth, Emil M.....	Grand Rapids
Schaubel, Howard J.....	Grand Rapids
Schermerhorn, L. J.....	Grand Rapids
Schnoor, E. W.....	Grand Rapids
Schnute, Louise F.....	Grand Rapids
Schuitema, Donald.....	Grand Rapids
Sculley, Ray E.....	Grand Rapids
Sevensma, Elisha S.....	Grand Rapids
Sevensma, Eugene S.....	Grand Rapids
Sevey, L. E.....	Grand Rapids
Shellman, Millard W.....	Grand Rapids
Shepard, B. H.....	Lowell
Sherwood, J. Vincent.....	Grand Rapids
Sidell, Chester M.....	Grand Rapids
Sidell, Richard H.....	Grand Rapids
Siemons, C. C.....(L)	Grand Rapids
Sluyter, J. S.....	Grand Rapids
Smith, A. B.....	Grand Rapids
Smith, Edwin M.....	Grand Rapids
Smith, Ferris N.....	Grand Rapids
Smith, R. Earle.....	Grand Rapids
Smith, Robert B.....	Grand Rapids
Snyder, Clarence.....	Grand Rapids
Southwick, G. Howard.....	Grand Rapids
Steffensen, W. H.....	Grand Rapids
Stonehouse, G. G.....	Grand Rapids
Stover, Virgil E.....	Grand Rapids
Stuart, Gerhardus J.....	Grand Rapids
Sugg, Cullen E.....	Grand Rapids
Sugyama, Tisuo.....	Grand Rapids
Sus Strong, Carl A.....	Grand Rapids
Swenson, H. C.....	Grand Rapids
Swenson, Leland E.....	Grand Rapids
Ten Have, J.....	Grand Rapids
Tesseine, A. J.....	Grand Rapids
Teusink, J. H.....	Cedar Springs
Thompson, A. B.....(E)	Grand Rapids
Thompson, Athol B.....	Grand Rapids
Thompson, Edw.....	Grand Rapids
Thompson, Frank D.....	Grand Rapids
Thompson, P. L.....	Grand Rapids
Tidey, Marcus B.....	Grand Rapids
Tiffany, Jos. C.....	Grand Rapids
Torgerson, Wm. R.....	Grand Rapids
Truog, Clarence P.....	Grand Rapids
Van Belois, Harvard J.....	Grand Rapids
Van Bree, R. S.....	Grand Rapids
Vanden Berg, Henry J.....	Grand Rapids
Vander Meer, Ray.....	Grand Rapids

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Van Duine, H. J.....Grand Rapids
 Van Harn, R. S.....Grand Rapids
 Vann, N. S.....Grand Rapids
 Van Noord, Gelmer A.....Grand Rapids
 Van't Hof, A.....Grand Rapids
 Van Pernis, Paul A.....Grand Rapids
 Van Reken, H. Everett.....Sparta
 Van Solkema, Andrew.....Grand Rapids
 Van Solkema, Arthur.....Grandville
 Van Woerkom, Daniel.....Grand Rapids

Van Zwaluwenburg, Benj. R.....
 Veldman, Harold E.....Grand Rapids
 Venema, J. R.....Grand Rapids
 Ver Meulen, John.....Grand Rapids
 Vis, William R.....Grand Rapids
 Vyn, J. D.....Grand Rapids
 Webber, Jerome.....Grand Rapids
 Wedgewood, L. G.....Grandville
 Wells, Merrill.....Grand Rapids
 Wenger, A. V.....Grand Rapids

Wenger, John N.....Coopersville
 Whalen, John.....Oakland, Calif.
 Whinery, Joseph B.....Grand Rapids
 Whinery, Joseph F.....Grand Rapids
 Willits, P. W.....Grand Rapids
 Wilson, Wm. E.....(R) Grand Rapids
 Winter, Garrett E.....Grand Rapids
 Wright, Thomas B.....Grand Rapids
 Wurz, John F.....Grand Rapids
 Yegge, J. P.....Kent City

Lapeer County

Best, Herbert M.....Lapeer
 Bishop, G. C.....Almont
 Burley, David H.....(E) Almont
 Chapin, Clarence D.....Columbiaville
 Dorland, Clarke.....Lapeer

Doty, James R.....Lapeer
 McBride, J. R.....Lapeer
 Merz, Henry G.....(E) Lapeer
 O'Brien, Daniel J.....Lapeer
 Palmer, Fred W.....Lapeer

Rehn, Adolph T.....Lapeer
 Smith, G. L.....Imlay City
 Thomas, J. Orville.....North Branch
 Zemmer, H. B.....Lapeer
 Zolliker, Carl R.....Imlay City

Lenawee County

Abraham, A. O.....Hudson
 Allen, R. A.....Adrian
 Blair, Thomas H.....Adrian
 Blanchard, L. E.....Hudson
 Blanden, Merwin R.....Tecumseh
 Colbath, W. E.....Adrian
 Claxton, W. T.....Britton
 DeRyke, Gilbert R.....Adrian
 Dickman, Harry M.....Hudson
 Hammel, H. H.....Tecumseh
 Hardy, P. B.....Tecumseh
 Heffron, Charles.....Adrian
 Heffron, Howard H.....Adrian
 Helzerman, Ralph F.....Tecumseh

Hewes, A. B.....Adrian
 Hewes, William.....Adrian
 Hinshaw, W. V.....Adrian
 Hornsby, W. B.....Clinton
 Howland, F. A.....Adrian
 Huntley, H. C.....Adrian
 Isley, H. E.....Blissfield
 Jewett, Wm. E., Jr.....Adrian
 Lamley, A. E.....Blissfield
 Loveland, Horace H.....Tecumseh
 MacKenzie, W. S.....Adrian
 Mast, W. H.....Tecumseh
 McCue, Francis J., Jr.....Adrian
 Marsh, R. G. B.....Tecumseh

Miller, Perry Lynford.....Adrian
 Morden, Esli T.....Adrian
 Pasternacki, Arthur S.....Adrian
 Patmos, Bernard.....Adrian
 Purfield, Wm.....Clinton
 Raabe, E. C.....Morenci
 Rogers, J. D.....Adrian
 Sayre, Phillip P.....Onsted
 Spalding, A. L.....Hudson
 Stafford, Leo.....Adrian
 Tubbs, R. V.....Blissfield
 Van Dusen, C. A.....Blissfield
 Whitehouse, L.....Morenci
 Wynn, G. H.....Adrian

Livingston County

Coughlin, Florence J.....Howell
 Crandell, Claire H.....Howell
 Duffy, Ray M.....Pinckney
 Finch, E. D.....Howell

Glenn, Bernard H.....Fowlerville
 Hendren, J. J.....Fowlerville
 Hill, Harold C.....Howell
 Huntington, H. G.....Howell
 Laboe, Edward W.....Howell

Lieber, R. W.....Howell
 McDowell, Guy Marshall.....Howell
 Sigler, Hollis L.....Howell
 Whitehouse, Walter M.....Howell

Luce County

Boyce, George H.....Newberry
 Campbell, Earl H.....Newberry

Gibson, Robert E.....Newberry
 Koss, Frank R.....Newberry
 Purmort, William R., Jr.....Newberry

Surrell, Mathew A.....Newberry
 Swanson, George F.....Newberry

Macomb County

Allen, Leroy K.....Roseville
 Banting, O. F.....Richmond
 Barker, John G.....Center Line
 Bower, A. B.....Armada
 Brady, Milo J.....St. Clair Shores
 Buckley, D. J.....Mt. Clemens
 Crawford, A. M.....Romeo
 Croman, Joseph M., Jr.....Mt. Clemens
 Croman, Jos. M., Sr.....(E) Mt. Clemens
 Curlett, James E.....(L) Roseville
 Dudzinski, Edmund J.....New Baltimore
 Engels, J. A.....Richmond
 Heine, A.....Mt. Clemens
 Isbey, Edward K.....Center Line

Jewell, James H.....Roseville
 Juliar, Joseph F.....Mt. Clemens
 Kane, Wm. J.....Mt. Clemens
 Lynch, Russell.....Center Line
 Moore, G. F.....Mt. Clemens
 Mulligan, P. T.....Mt. Clemens
 Reichman, Joseph J.....Mt. Clemens
 Reitzel, R. H.....Mt. Clemens
 Revere, J. O.....Mt. Clemens
 Rivard, Charles L.....Grosse Pointe Woods
 Roth, G. E.....Detroit
 Ruedisueli, Clarence A.....Roseville
 Rothman, A. M.....East Detroit
 Salot, R. F.....Mt. Clemens

Scher, Joseph N.....Mt. Clemens
 Scher, Sydney.....Mt. Clemens
 Siegfried, E. G.....New Haven
 Singer, Nelson.....East Detroit
 Smith, Milton C.....Mt. Clemens
 Stone, Elizabeth A.....Romeo
 Sturm, Fred A.....St. Clair Shores
 Thompson, A. A.....Mt. Clemens
 Ullrich, R. W.....Mt. Clemens
 Wellard, Henry C.....New Baltimore
 Whitley, Alec.....St. Clair Shores
 Wilde, M. M.....Warren
 Wiley, D. Bruce.....Utica
 Wolfson, Victor H.....Mt. Clemens

Manistee County

Grant, C. L.....Manistee
 Hansen, E. C.....Manistee
 Konopa, John F.....Manistee
 Lalime, Ruth E.....Bear Lake
 Lewis, Lee A.....(E) Manistee

MacMullen, Harlen.....(R) Manistee
 Miller, E. B.....Manistee
 Murphy, Frank E.....Cadillac
 Norconk, Ward H.....Bear Lake
 Oakes, Ellery A.....Manistee

Ogilvie, G. D.....Manistee
 Quinn, Henry M.....Copemish
 Ramsdell, Homer A.....Manistee
 Switzer, Lars W.....Manistee

Marquette-Alger Counties

Bennett, Arthur K.....Marquette
 Bennett, M. C.....Marquette
 Berry, Robert F.....Marquette
 Bertucci, J. P.....Ishpeming
 Burke, R. A.....Negaunee
 Bottum, Charles N.....Marquette
 Casler, W. L.....Marquette
 Cooperstock, M.....Marquette
 Corcoran, W. A.....Ishpeming
 Drury, Chas. P.....Marquette
 Elizinga, E. R.....Marquette
 Erickson, Arvid W.....Ishpeming
 Fennig, F. A.....Marquette

Harkin, J. C.....Marquette
 Harsh, R. C.....Marquette
 Hart, P. P.....Ishpeming
 Hirwas, C. L.....Marquette
 Hornbogen, D. P.....Marquette
 Howe, L. W.....Marquette
 Keskey, George I.....Marquette
 Knudson, George.....Negaunee
 Lambert, W. C.....Marquette
 LeGovan, C.....Marquette
 McCann, Neal J.....Marquette
 Mudge, W. A.....Negaunee
 Narotzky, Archie S.....Ishpeming

Nicholson, J. B.....Marquette
 Niemi, O. I.....Marquette
 Paine, Raymond Lee.....Negaunee
 Paull, Frank O.....Marquette
 Schweinsberg, Sara D.....Marquette
 Serbst, Charles.....Marquette
 Sicotte, Isaiah.....Michigan
 Talso, Jacob.....Ishpeming
 Van Riper, Paul.....Champion
 Waldie, George McLeod.....Ishpeming
 Wickstrom, Geo.....Munising
 Williams, R. G.....Ishpeming

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Mason County

Blanchette, Victor J.....Scottville
Comodo, Nicholas M.....Ludington
Fenneman, Robert J.....Scottville
Goulet, L. J.....Ludington

Hoffman, Howard.....Ludington
Hunt, Ivan L.....Scottville
Lintner, Roy C.....Ludington
Martin, Wm. S.....Ludington

Ostrander, R. A.....Ludington
Paukstis, Charles.....Ludington
Scott, Robert Redvers.....Ludington
Slaybaugh, J. C.....Ludington

Mecosta-Osceola-Lake Counties

Bruggema, Jacob.....Evert
Chess, Leo F.....Reed City
Franklin, Benjamin L.....Remus
Ikovich, Paul.....Reed City

Kilmer, Paul B.....Reed City
MacIntyre, Donald.....Big Rapids
Merlo, F. A.....Big Rapids
Nelson, Lorenzo.....Baldwin

Peck, Louis K.....Lake City
Treynor, Thomas P.....Big Rapids
White, J. A.....Big Rapids
Yeo, Gordon H.....Big Rapids

Medical Society of North Central Counties

Clippert, C. G.....Grayling
Coulter, Keith Douglas.....Gladwin
Drescher, Geo. A.....Lewiston
Egle, Joseph L.....Gaylord
Forney, F. A.....Gaylord

Harris, Levi A.....(E) Gaylord
Jardine, Hugh M.....West Branch
Keyport, C. R.....Grayling
Martzowka, M. A.....Roscommon
McDowell, D. B.....West Branch

McKillop, G. L.....Gaylord
Palm, Geo.....Prudenville
Peckham, Richard.....Gaylord
Peterson, Carl A.....Phoenix, Ariz.
Stealy, Stanley.....Grayling

Menominee County

Brukhardt, Herman R.....Menominee
Dewane, F. J.....Menominee
Flanagan, Clarence B.....Menominee
Glickman, L. Grant.....Menominee
Heidenreich, John R.....Daggett

Jones, Wm. S.....Menominee
Kaye, J. T.....Menominee
Kerwell, K. C.....Stephenson
Peterson, A. R.....Daggett
Sanford, Joseph.....Stephenson

Sawbridge, Edward.....(E) Stephenson
Schroeder, J. M.....Menominee
Sethney, Henry T.....Menominee
Towey, J. W.....Powers

Midland County

Bowsher, Robert E.....Midland
Bulmer, Dan J.....Midland
Buskirk, Maurice D.....Midland
Gay, Harold H.....Midland
Gordon, Harold L.....Midland

Grewe, N. G.....Midland
Hautau, Emily.....Midland
Ittner, Martin.....Midland
Linsenmann, Karl W.....Midland
MacCallum, Charles.....Midland
Maynard, W. A.....Coleman

Meisel, Edward H.....Midland
Pike, Melvin H.....Midland
Rice, Robert E.....Midland
Sherk, J. H.....Midland
Towsley, W. D.....Midland

Monroe County

Acker, Wm. F.....Monroe
Ames, Florence.....Monroe
Balk, A. C.....Monroe
Barker, Vincent L.....Monroe
Blakey, L. C.....Monroe
Bond, W. W.....Monroe
Brancheau, L. T.....Petersburg
Cigany, Zoltan B.....Carleton
Dusseau, S. V.....(E) Erie
Ewing, R. T.....Monroe
Flanders, J. P.....Monroe
Frary, R. A.....Monroe

Gelhaus, Wm. J.....Monroe
Golinvaux, C. J.....Monroe
Heffernan, John F.....Carleton
Hensel, Hilda.....Monroe
Hunter, M. A.....Monroe
Johnson, A. Esther.....Monroe
Kelso, S. Newton, Jr.....Ida
Landon, Herbert W.....Monroe
Long, Edgar C.....Monroe
Long, Sara.....Monroe
Mather, C. B.....Monroe
McDonald, T. A.....Monroe

McGeoch, R. W.....Monroe
McMillin, J. H.....Monroe
Meck, H. L.....Dundee
Newcomer, Sheldon R.....Monroe
Parmelee, O. E.....Lambertville
Pinkus, Herman.....Monroe
Reisig, A. H.....Monroe
Sanger, Emerson J.....Monroe
Tomlinson, Ledyard.....Newport
Wagar, Spencer.....Rockwood
Williams, Robert J.....Monroe
Williamson, G. W.....Dundee

Muskegon County

Anderson, A. J.....Muskegon
Anderson, Axel W.....Lakewood Club
August, R. V.....Muskegon Heights
Barnard, Helen.....Muskegon
Bate, L. C.....Muskegon
Beers, Charles.....Muskegon Heights
Benedict, A. L.....Muskegon
Bloom, C. J.....Muskegon
Boyd, D. R.....Muskegon
Boyd, John.....Muskegon
Bradshaw, Park S.....Muskegon
Christophersen, J. W.....Muskegon
Clapp, Henry W.....Muskegon
Closz, H. F.....Muskegon
Cohan, Sol G.....Muskegon
Dasler, A. F.....Muskegon
Derezinski, Clement F.....Muskegon
Diskin, Frank.....Muskegon
Douglas, Robert.....Muskegon
Durham, C. J.....Muskegon
Dykhuizen, Harold D.....Muskegon
Eckerman, C. T.....Muskegon
Fillingham, Enid.....Muskegon
Fleisch, C. B.....Muskegon
Fleishman, Norman.....Muskegon
Foss, Ed. O.....Muskegon
Gaikema, E. W.....Muskegon

Garber, F. W., Jr.....Muskegon
Garland, J. O.....Muskegon
Gillard, James.....Muskegon
Goltz, Martha.....Montague
Greene, Henry Phillip.....Muskegon
Griffith, Robert M.....Muskegon
Hagen, William A.....Muskegon
Hannum, F. W.....Muskegon
Harrington, A. F.....Muskegon
Harrington, R. J.....Muskegon
Hartwell, S. W.....Muskegon
Heneveld, Edw. H.....Muskegon
Heneveld, John.....Muskegon
Holly, Leland E.....Muskegon
Holmes, Roy Herbert.....Muskegon
Joistad, A. H.....Muskegon
Kane, Thomas J.....Muskegon
Kav, Ceceilia.....Muskegon
Keilin, Marie.....Muskegon
Kerr, H. J.....Muskegon
Lange, E. W.....Muskegon
Lauretti, Emil.....Muskegon
Laurin, V. Samuel.....Muskegon
Lefevre, Louis.....Muskegon
Lefevre, Wm. M.....Muskegon
Loder, Leonel Lewis.....Muskegon
Loomis, John L.....Muskegon
Mandeville, C. B.....Muskegon

Medema, Paul.....Muskegon
Meengs, M. B.....Muskegon
Miller, Philip L.....Muskegon
Morford, F. N.....Muskegon
Mulligan, A. W.....Muskegon
Oden, Constantine L.....Muskegon
Petkus, Antonie.....Muskegon Heights
Pettis, Emmett.....Muskegon
Powers, Lunette.....Muskegon
Price, Leonard.....Muskegon
Pyle, H. J.....Muskegon
Risk, R. A.....Muskegon
Risk, Robert D.....Muskegon
Schollen, W.....Muskegon Heights
Sears, Richard.....Muskegon
Shebasta, Emil.....Muskegon
Smith, Luther.....Muskegon
Swartout, W. C.....Muskegon
Teifer, Charles A.....Muskegon
Thieme, S. W.....Ravenna
Thornton, E. S.....Muskegon
Toy, Charles.....Muskegon
Wagenaar, E. H.....Muskegon
Wiersma, Silas C.....Muskegon
Wilke, C. A.....Montague
Williams, E. V.....Muskegon Heights
Wilson, P. S.....Muskegon

Newaygo County

Deur, T. R.....Grant
Geerlings, Lambert.....Fremont
Geerlings, Willis.....Fremont

Klein, J. Paul.....Fremont
Masters, Brooker L.....Fremont
Moore, H. R.....Newaygo
O'Neill, J. W.....White Cloud

Stryker, O. D.....Fremont
Tompsett, Arthur C.....Hesperia
Tompsett, Arthur C., Jr.....Hesperia

ROSTER 1947

Northern Michigan

Alm, Bernhard T.....Petoskey
Beuker, Bernard.....East Jordan
Blum, Benj. B.....Petoskey
Burns, Dean C.....Petoskey
Chapman, Willis Earle.....(E) Cheboygan
Conkle, Guy C.....Boyne City
Conti, Joseph.....Petoskey
Conway, Wm. S.....Petoskey
Duffie, Don Hastings.....Central Lake
Elliott, E. James.....Boyne City
Frank, Gilbert E.....Harbor Springs

Gervers, J. H. R.....Bellaire
Grate, L.....Charlevoix
Hegener, A. J.....Petoskey
Kennedy, Julien C.....Cheboygan
Larson, Walter E.....Cheboygan
Lashmet, Floyd H.....Petoskey
Lentini, Nicholas.....Cheboygan
Lilga, Harris V.....Petoskey
Litzenburger, A. F.....Boyne City
Mayne, Frederick C.....Cheboygan
McClintock, Robert S.....Charlevoix

McMillan, Fraley.....Charlevoix
Palmer, Russell.....St. James
Parks, W. H.....Petoskey
Power, C. J.....Mackinaw City
Rodgers, John.....Bellaire
Saltonstall, Gilbert B.....Charlevoix
Stringham, J. R.....Cheboygan
Trudeau, J. M.....Cheboygan
Van Dellen, Jerrian.....East Jordan
Weberg, Kathryn.....Petoskey
Wood, George H.....Onaway

Oakland County

Abbott, V. C.....Pontiac
Arnkoff, Harry.....Pontiac
Aschenbrenner, Z. R.....Farmington
Baker, Frederick A.....Pontiac
Baker, Robert H.....Pontiac
Bannow, Robert J.....Pontiac
Barker, Howard B.....Pontiac
Barrow, Winona M.....Royal Oak
Bauer, Edward G.....Pontiac
Bauer, Ernest W.....Hazel Park
Beattie, W. G.....Ferndale
Beck, Otto O.....Birmingham
Berkaw, Kenneth A.....Birmingham
Blue, Jane.....Pontiac
Boucher, R. E.....Royal Oak
Buehrig, Robert C.....Clarkston
Burke, Chauncey G.....Pontiac
Butler, Samuel A.....Pontiac
Calhoun, Ethel T.....Birmingham
Cameron, Donald A.....Royal Oak
Carr, Wm. H.....Holly
Christie, Edward.....Pontiac
Christie, J. W.....Pontiac
Cobb, Leon F.....Pontiac
Cobb, Thomas H.....Pontiac
Cole, Marvin.....Pontiac
Collins, Edward F.....Pontiac
Cooper, Robert J.....Pontiac
Crissman, Harold C.....Ferndale
Cudney, Ethan B.....Pontiac
Dahlgren, Carl.....Keego Harbor
Darling, C. G., Jr.....Pontiac
Deutsch, Wm. L.....Huntington Woods
Dobski, Edwin J.....Pontiac
Ekelund, Clifford T.....Pontiac
Farnham, Lucius Augustine.....Pontiac
Ferris, Ralph G.....Birmingham
Fitzpatrick, Francis.....Pontiac
Foust, Earl W.....Hazel Park
Francis, Donald.....Pontiac
Furlong, Harold A.....Pontiac
Gaensbauer, Ferdinand.....Pontiac
Garipey, Bernard F.....Royal Oak
Gatley, C. R.....Pontiac
Gatley, L. Warren.....Pontiac
Geib, Ormond D.....Rochester
Gehring, Norman F.....Pontiac
Gerls, Frank B.....Pontiac

Gibson, Wellington C.....Milford
Gill, Matthew J.....Pontiac
Grant, William A.....Milford
Green, James D.....Birmingham
Green, Wm. M.....Pontiac
Hackett, Daniel Jos.....Pontiac
Haddock, D. A.....Walled Lake
Halsted, Lee H.....Farmington
Hammonds, E. E.....Birmingham
Harvey, Campbell.....Pontiac
Hassberger, J. B.....Birmingham
Hathaway, Clarence L.....Lake Orion
Hathaway, William.....Rochester
Henry, Colonel R.....Ferndale
Hensley, C. B.....Lake Orion
Howlett, E. V.....Pontiac
Hoyt, D. F.....Pontiac
Hubert, John R.....Pontiac
Hume, T. W. K.....Auburn Heights
Hunt, Homer H.....Pontiac
Hurst, Daniel D.....Pleasant Ridge
Hutchinson, W. G.....Bloomfield Hills
Kemp, Felix J.....Pontiac
Kemp, W. Lloyd.....Birmingham
Koehler, William H.....Royal Oak
Lambie, John S.....Birmingham
Lambert, Alvin Gerald.....Ferndale
Larson, B. T.....Pontiac
Lewis, S. M.....Ferndale
Lockwood, C. E.....Holly
Mackenzie, O. R.....Walled Lake
Margrave, Edmund C.....Royal Oak
Markley, John Martin.....Pontiac
Mason, Robert J.....Birmingham
McConkie, J. P.....Birmingham
McEvoy, Francis J.....Royal Oak
McNeill, H. H.....Pontiac
Mehas, C. P.....Pontiac
Mercer, Frank A.....Pontiac
Merrill, Lionel N.....Royal Oak
Mershon, R. B.....Royal Oak
Mitchell, B. M.....Pontiac
Monroe, John D.....Pontiac
Morton, James A.....Pontiac
Neafie, Chas. A.....Pontiac
Newcomb, Arnold B.....Berkley
Norup, John.....Berkley
Nosanchuk, Joseph.....Pontiac

Olsen, Richard E.....Pontiac
Pauli, Theodore H.....Pontiac
Pelletier, Charles J.....Hazel Park
Porritt, Ross J.....Pontiac
Ports, Preston W.....Farmington
Prather, Frank W.....Huntington Woods
Prevette, Isaac C.....Pontiac
Raynale, George P.....Birmingham
Riggs, Harry L.....Pontiac
Riker, Aaron D.....Pontiac
Roehm, Harold.....Birmingham
Rowley, Laurie G.....Drayton Plains
Russell, Vincent P.....Royal Oak
Ruva, Joseph.....Pontiac
St. John, Harold A.....Pontiac
Schlecte, Carl.....Rochester
Schlecte, Eve Miriam.....Rochester
Schuneman, Howard.....Ferndale
Shadley, Maxwell.....Pontiac
Sheffield, L. C.....Pontiac
Sibley, H. A.....Pontiac
Simpson, E. K.....Pontiac
Smith, Carleton A.....Birmingham
Smith, Donald S.....Pontiac
Smith, Ellen.....Pontiac
Spencer, Lloyd H.....Ferndale
Spoehr, Eugene L.....Ferndale
Spohn, Earl W.....Royal Oak
Stagman, John Condon.....Pontiac
Stahl, Harold F.....Oxford
Stanley, Wm. F.....Ferndale
Starker, Clarence T.....Pontiac
Steinberg, Norman.....Royal Oak
Stolpman, A. K.....Birmingham
Sutton, Palmer E.....Royal Oak
Swickle, Edward F.....Clawson
Tauber, A.....Pontiac
Tuck, Raymond G.....Pontiac
Uloth, Milton J.....Ortonville
Van Holtern, H. L.....Pontiac
Wagley, P. V.....Pontiac
Wagner, Ruth E.....Royal Oak
Wake, Douglas L.....Royal Oak
Warner, J. F.....Pontiac
Watson, Thomas Y.....Birmingham
Williams, John P.....Pontiac
Young, Arthur R.....Pontiac

Oceana County

Flint, Charles.....Hart
Hasty, Willis A.....Shelby
Hayton, A. R.....Shelby

Heard, Wm.....Pentwater
Jensen, Viggo.....Shelby
Munger, L. P.....Hart
Nicholson, John H.....Hart

Robinson, W. Gordon.....Hart
Ryan, Wm. J.....Shelby
Wood, Merle G.....Hart

Ontonagon County

Bender, Jesse L.....Mass

Hogue, H. B.....Ewen
Rubinfeld, S. H.....Ontonagon

Strong, W. F.....Ontonagon

Ottawa County

Barrett, C. Dale.....Grand Haven
Beernink, E. H.....Grand Haven
Bloemendaal, D. C.....Zeeland
Blomendaal, W. B.....Grand Haven
Boone, Cornelius E.....Zeeland
Clark, Nelson H.....Holland
Cook, Carl S.....Holland
DeVries, H. G.....Holland
DeYoung, Fred.....Spring Lake
Hager, Ralph.....Hudsonville
Hamelink, M. H.....Holland

Harms, H. P.....Holland
Kemmer, Gerrit.....Zeeland
Kitchel, John.....Grand Haven
Kitchel, Mary.....Grand Haven
Kools, William Clarence.....Holland
Leenhouts, Abraham.....Holland
Long, C. E.....Grand Haven
Nichols, Rudolph H.....Holland
Nykamp, Russell.....Zeeland
Presley, Wm. J.....Grand Haven
Schalftenaar, A. H.....Holland

Schrick, Edna C.....Holland
Ten Have, Ralph.....Grand Haven
Timmerman, E. C.....Coopersville
Van Appledorn, Chester J.....Holland
Van Der Berg, E.....Holland
Vander Velde, O.....Holland
Wells, Kenneth.....Spring Lake
Westrate, William.....Holland
Winter, John K.....Holland
Winter, Wm. G.....Holland
Yonkman, F. F.....Madison, N. J.

Saginaw County

Ackerman, G. L.....Saginaw
Anderson, W. K.....Saginaw
Bagley, U. S.....Saginaw
Bagshaw, David E.....Saginaw

Berberovich, T. F.....Saginaw
Bishop, H. M.....Saginaw
Brender, Fred P.....Frankenmuth
Brock, W. H.....Saginaw

Bruton, Martin F.....Saginaw
Bucklin, Robert.....Saginaw
Bullington, Bert Montell.....Saginaw
Busch, Frank J.....Saginaw

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Butler, M. G.....Saginaw
 Button, A. C.....Saginaw
 Cady, F. J.....Saginaw
 Cameron, Allen K.....Saginaw
 Campbell, L. A.....Saginaw
 Chisena, Peter R.....Bridgeport
 Clark, Wilbert.....(L) Kenmore, N. Y.
 Clayton, A. A.....Saginaw
 Cortopassi, Andre.....Saginaw
 Cortopassi, V. E.....Saginaw
 Cory, C. W.....Saginaw
 Curtis, James.....Saginaw
 Durman, Donald C.....Saginaw
 Ely, C. W.....Saginaw
 Ernst, Arthur R.....Saginaw
 Eymmer, Esther.....Saginaw
 Gage, David P.....Saginaw
 Galsterer, Edwin C.....Saginaw
 Goman, Louis D.....Saginaw
 Grigg, Arthur.....(E) Saginaw
 Grigg, Arthur P.....Saginaw
 Hand, Eugene A.....Saginaw
 Harvie, L. C.....Saginaw
 Helmkamp, H. O.....Saginaw
 Hester, E. G.....Saginaw
 Hill, Victor L.....Saginaw
 Hohn, Fred, Jr.....Saginaw
 Howell, Don M.....Saginaw
 Jaenichen, R.....Saginaw
 James, J. W.....Saginaw
 Jiroch, R. S.....Saginaw

Jordan, Leo A.....Saginaw
 Kemp, J. N.....(L) Saginaw
 Kempton, R. M.....Saginaw
 Kerr, William.....Saginaw
 Kleekamp, H. G.....Saginaw
 Klippen, Arthur J.....Saginaw
 Kowals, F. V.....Saginaw
 Ling, Ernest M.....Hemlock
 Ling, Kenneth C.....Hemlock
 Lohr, O. W.....Saginaw
 Longstreet, Martha L.....Saginaw
 Luger, F. E.....Saginaw
 Lurie, Robert.....Saginaw
 Lyle, R. C.....Bridgeport
 MacKinnon, Edwin D.....Saginaw
 MacMeekin, James Ware.....Saginaw
 Manning, John E.....Saginaw
 Markey, Jos. P.....Saginaw
 Martzowka, Wm. P.....Saginaw
 Matthews, Harry C.....Saginaw
 Maurer, John A.....Saginaw
 Mayne, Harold.....Saginaw
 McKinney, Alex R.....Saginaw
 McLandress, Joshua A.....Saginaw
 Meyer, Henry J.....Saginaw
 Mikan, V. Robert.....Saginaw
 Moon, A. R.....Saginaw
 Morgrette, Leonard.....Saginaw
 Mudd, Richard D.....Saginaw
 Murphy, Albert P.....Saginaw
 Murray, M. J.....Saginaw

Nelson, Oscar A.....Saginaw
 Nicholas, Mildred.....Saginaw
 Northway, Robert O.....Saginaw
 Novy, F. O.....Saginaw
 Olson, Porter.....Saginaw
 Ostrander, Frank W.....Freeland
 Phillips, Homer A.....Saginaw
 Pietz, Frederick.....Saginaw
 Pillsbury, Edward A.....Frankenmuth
 Potvin, Clifford D.....Saginaw
 Poole, Frank A.....(L) Saginaw
 Richards, Ned W.....Saginaw
 Richter, Harry J.....Saginaw
 Ryan, M. D.....(E) Saginaw
 Sargent, D. V.....Saginaw
 Sharp, Martin C.....Saginaw
 Sheldon, S. A.....Saginaw
 Siler, Delbert E.....Saginaw
 Skowronski, Casimer A.....Saginaw
 Slack, Walter K.....Saginaw
 Stahly, Edward H.....Saginaw
 Standen, A. C.....Saginaw
 Stewart, George W.....Saginaw
 Thompson, A. B.....Saginaw
 Tiedke, G. E.....Saginaw
 Toshach, C. E.....Saginaw
 Volk, V. K.....Saginaw
 Wallace, Herbert C.....Saginaw
 Westlund, Norman.....Saginaw
 Yntema, S.....Saginaw

Sanilac County

Blanchard, E. W.....Deckerville
 Ellis, N. J.....Croswell
 Gift, W. A.....Marlette
 Hart, R. K.....Croswell

Lance, Paul E.....Marlette
 Learmont, H. H.....Croswell
 McGunegle, K. T.....Sandusky
 Seager, M. Cole.....Brown City

Tweedie, G. Evans.....Sandusky
 Tweedie, S. Martin.....Sandusky
 Webster, John C.....Marlette

St. Clair County

Armsbury, A. R.....Marine City
 Atkinson, C. F.....Marine City
 Attridge, J. A.....(L) Port Huron
 Banting, K. C.....Port Huron
 Battley, J. C. Sinclair.....Port Huron
 Beck, Frank K.....Port Huron
 Beer, Joseph F.....St. Clair
 Benjamin, Clayton C.....Port Huron
 Borden, C. L.....Port Huron
 Boughner, W. H.....Algonac
 Bovee, M. E.....Port Huron
 Bowden, W. S.....Marine City
 Brush, Howard O.....Port Huron
 Burke, Ralph M.....Port Huron
 Burley, Jacob H.....Port Huron
 Callery, A. L.....(L) Port Huron
 Campbell, R. H.....West Hartford, Conn.
 Carey, Lewis M.....Detroit

Carney, F. V.....St. Clair
 Clyne, B. C.....Yale
 Cooper, T. H.....Port Huron
 DeGurse, T. E.....Marine City
 Fitzgerald, E. W.....Port Huron
 Hall, W. E. B.....Port Huron
 Hazeldine, Herbert J.....Port Huron
 Hills, Richard W.....Yale
 Holcomb, R. J.....Marine City
 Hoyt, Charles M.....Port Huron
 Kahn, Oscar B.....Capac
 Kest, Geo. Matthew.....Port Huron
 Kirker, F. O.....St. Clair
 Lauridsen, James.....Port Huron
 LeGalley, K. B.....Port Huron
 Licker, R. R.....Port Huron
 Ludwig, Claude A.....Port Huron
 Ludwig, F. E.....Port Huron
 Martin, C. S.....Port Huron

McColl, D. J.....(E) Port Huron
 McColl, Neil J.....Port Huron
 MacPherson, C. A.....St. Clair
 Meredith, E. W.....Port Huron
 Novak, Walter S.....Port Huron
 Patterson, D. Webster.....Port Huron
 Pollock, Donald A.....Yale
 Reynolds, Annie E.....Port Huron
 Sanderson, Joseph L.....Port Huron
 Schaefer, W. A.....Port Huron
 Sites, E. C.....Port Huron
 Thomas, C. F.....Port Huron
 Treadgold, Douglas.....Port Huron
 Ware, John R.....Port Huron
 Wass, Henry C.....St. Clair
 Waters, George.....Port Huron
 Wetzel, John O.....Port Huron
 Wight, William G.....Yale

St. Joseph County

Berg, Lawrence A.....Sturgis
 Blood, J. V.....Three Rivers
 Brunson, A. E.....Sturgis
 Braham, Wilbur.....Sturgis
 Fiegel, S. A.....Sturgis
 Fortner, R. J.....Three Rivers
 Gillespie, E.....Sturgis
 Hoekman, Aben.....Constantine

Holm, Arvid G.....Three Rivers
 Hoyt, Howard P.....Colon
 Miller, C. G.....Sturgis
 Parrish, Marion.....Sturgis
 Pennington, H. C.....White Pigeon
 Penzotti, Stanley.....Three Rivers
 Porter, C. G.....Three Rivers
 Raich, Fred J.....White Pigeon

Reed, Fred R.....Three Rivers
 Sheldon, J. P.....Sturgis
 Slote, L. K.....Constantine
 Springer, R. A.....Centerville
 Sweetland, G. J.....Constantine
 Tesar, F. J.....Centerville
 Weir, Dale C.....Three Rivers
 Zimont, R. D.....Constantine

Shiawassee County

Arnold, Alfred L., Jr.....Owosso
 Backe, John C.....Durand
 Bennett, George W.....Elsie
 Brown, Richard J.....Ann Arbor
 Buzzard, Walter Davenport.....Chesaning
 Chipman, E. M.....Owosso
 Cook, Ernest.....Corunna
 Dillon, James.....Perry

Fillinger, W. B.....Ovid
 Harkness, C. A.....Owosso
 Hoshal, Vern L.....Durand
 Hume, Arthur M.....(E) Owosso
 Hume, Harold A.....Owosso
 Janci, Julius.....Owosso
 McKnight, E. R.....Owosso
 Merz, W. L.....Owosso
 Parker, W. T.....Owosso

Pochert, R. C.....Owosso
 Richards, C. J.....Durand
 Shalmark, J. F.....Owosso
 Shepherd, W. F.....Owosso
 Slagh, E. M.....Elsie
 Watts, Fred A.....Owosso
 Weinkauf, W. F.....Corunna
 Weston, C. L.....Owosso

Tuscola County

Ballard, James H.....Cass City
 Barbour, Harry A.....Mayville
 Bates, George.....(E) Kingston
 Berman, Harry.....Millington
 Cook, Raymond.....Akron
 Dickerson, Willard W.....Caro
 Dixon, Robert L.....Wahjamega
 Donahue, H. Theron.....Cass City

Flett, Richard O.....Millington
 Gugino, Frank James.....Reese
 Hoffman, T. E.....Vassar
 Howlett, R. R.....Caro
 Johnson, O. G.....Mayville
 Kaven, G. H.....Unionville
 Lamberti, Thomas G.....Caro
 Merrill, Elmer H.....Caro
 Morris, Frank L.....Cass City

Nigg, Herbert L.....Caro
 Pelczar, Walter.....Unionville
 Ruskin, D. B.....Caro
 Savage, Lloyd L.....Caro
 Shoemaker, J.....Vassar
 Starmann, Bernard.....Cass City
 Swanson, E. C.....Vassar
 Von Renner, Otto.....Vassar

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Van Buren County

Boothby, Carl.....Hartford
Boothby, F. M.....Lawrence
Boothby, Paul R.....Lawrence
Bope, William P.....Decatur
Buckborough, M. W.....South Haven
Diephuis, Bert.....South Haven
French, Merle R.....Paw Paw
Gano, Avison.....Bangor

Giffen, John R.....(E) Bangor
Greenman, Newton H.....Decatur
Hoyt, W. F.....(E) Paw Paw
Itzen, J. F.....South Haven
Maxwell, J. Charles.....(E) Paw Paw
McFadden, R. I.....Bloomingsdale
Penoyar, C. L.....South Haven
Ralyea, John R.....Paw Paw

Roberts, M. S.....South Haven
Spalding, R. W.....Gobles
Steele, Arthur H.....Paw Paw
TenHouten, Charles.....Paw Paw
Terwilliger, Edwin.....South Haven
Urist, Martin J.....South Haven
Young, William R.....Lawton

Washtenaw County

Aldrich, Napier S.....Ann Arbor
Alexander, John.....Ann Arbor
Asher, Wm. M.....Ann Arbor
Badgley, Carl E.....Ann Arbor
Barker, Paul.....Ann Arbor
Barnwell, John B.....Washington, D. C.
Barr, A. S.....Ann Arbor
Barry, Geo. R.....Ann Arbor
Barss, Harold D.....Ypsilanti
Bass, Thomas J.....Ypsilanti
Bates, Wm. H.....Ann Arbor
Bassow, Paul H.....Ann Arbor
Bauer, Gerhard H.....Ann Arbor
Baugh, R. H.....Ypsilanti
Beebe, Hugh M.....Ann Arbor
Bell, Margaret.....Ann Arbor
Belsler, Walter.....Ann Arbor
Bethel, Frank Hartstuff.....Ann Arbor
Block, Malcolm L.....Ann Arbor
Bohne, A. Waite.....Ann Arbor
Brace, William M.....Ann Arbor
Britton, H. B.....Ypsilanti
Brownlee, Wm. M.....Ann Arbor
Buscaglia, C. J.....Ypsilanti
Buxton, Robert W.....Ann Arbor
Camp, Carl Dudley.....Ann Arbor
Cawley, Edward P.....Ann Arbor
Cochran, William L.....Ann Arbor
Coller, Frederick A.....Ann Arbor
Conn, Jerome W.....Ann Arbor
Coxon, A. Wm.....Ann Arbor
Cummings, H. H.....Ann Arbor
Curtis, Arthur C.....Ann Arbor
DeJong, Russell.....Ann Arbor
DeTar, John S.....Milan
Dingman, Reed O.....Ann Arbor
Dolphin, W. E.....Ypsilanti
Donaldson, S. W.....Ann Arbor
Duff, Ivan F.....Ann Arbor
Engelke, Otto K.....Ann Arbor
Everett, Meldon.....Ann Arbor
Falls, Harold F.....Ann Arbor
Fink, George C.....Ann Arbor
Fitzgerald, Thomas D.....Ann Arbor
Forsythe, Warren E.....Ann Arbor
Frailick, F. Bruce.....Ann Arbor
Francis, Thomas, Jr.....Ann Arbor
Frost, Lyle W.....Ypsilanti
Frye, Carl H.....Ann Arbor
Furstenberg, Albert C.....Ann Arbor
Ganzhorn, Edwin.....Ann Arbor
Gates, John L.....Ann Arbor
Gates, Neil A., Jr.....Ann Arbor
Goldman, Abe A.....Ann Arbor
Gotz, Alexander.....Ann Arbor
Gulde, Andros.....Chelsea

Haas, Reynold L.....Ann Arbor
Hagerman, George W.....Ann Arbor
Haight, Cameron.....Ann Arbor
Hall, Winston C.....Ann Arbor
Hammond, W. W.....Plymouth
Handorf, Heinrich Hugo.....Northville
Hannum, M. R.....Milan
Harris, Bradley M.....Ypsilanti
Harris, Scott T.....Ypsilanti
Henderson, John W.....Ann Arbor
Henry, L. Dell.....Ann Arbor
High, Howard C.....Ann Arbor
Himler, Leonard E.....Ann Arbor
Hodges, Fred J.....Ann Arbor
Holt, John F.....Ann Arbor
Hoobler, Sibley W.....Ann Arbor
House, Frederic B.....Ann Arbor
Howard, S. C.....Ann Arbor
Hunt, Robert E.....Ann Arbor
Jenkins, Daniel E.....Ann Arbor
Jimenez, Buenaventura.....Ann Arbor
Johnston, Franklin D.....Ann Arbor
Kahn, Edgar A.....Ann Arbor
Kambly, Arnold H.....Ann Arbor
Keeffe, Eugene J.....Ann Arbor
Keene, Clifford H.....Ann Arbor
Kemper, J. W.....Ann Arbor
Kert, Morley J.....Ann Arbor
Killins, Charles G.....Ann Arbor
Klingsman, Theophil.....Ann Arbor
Knoll, Leo A.....Ann Arbor
La Fever, Sidney L.....Ann Arbor
Lampe, Isadore.....Ann Arbor
Law, John L.....Ann Arbor
Litchy, Dorman E.....Ann Arbor
Lowell, Vivion F.....Ypsilanti
Lvons, Richard H.....Ann Arbor
MacIntyre, Robert S.....Ann Arbor
MacKay, Lavina G.....Ann Arbor
Malcolm, Karl D.....Ann Arbor
Mallery, Otto T., Jr.....Ann Arbor
Marshall, Mark.....Ann Arbor
Martin, Donald W.....Ypsilanti
Maxwell, James H.....Ann Arbor
McCotter, Rollo E.....Ann Arbor
McEachern, Thomas H.....Ann Arbor
McKay, Clinton H.....Charlotte, N. C.
Milford, Albert F.....Ypsilanti
Miller, Harold.....Saline
Miller, Norman F.....Ann Arbor
Moore, Donald F.....Ypsilanti
Morrow, Wm. J.....Ann Arbor
Muehlig, George F.....Ann Arbor
Myers, Dean W.....Ann Arbor
Nesbit, Reed M.....Ann Arbor
Newton, Chas. W.....Ann Arbor

Nickel, Kenneth C.....Ypsilanti
Oliphant, L. W.....Ann Arbor
Parnall, Christopher G.....Ann Arbor
Patterson, Ralph M.....Ann Arbor
Peet, Max.....Ann Arbor
Pollard, H. M.....Ann Arbor
Potter, Marcia.....Ypsilanti
Preston, John F., Jr.....Ann Arbor
Price, Helen F.....Ann Arbor
Prout, Gordon J.....Saline
Ransom, Henry.....Ann Arbor
Raphael, Theophile.....Ann Arbor
Ratliff, Rigdon K.....Ann Arbor
Riecker, H. H.....Ann Arbor
Riggs, Harold W.....Ann Arbor
Ross, C. Howard.....Ann Arbor
Sayre, George S.....Ypsilanti
Schmale, Herbert T.....Ann Arbor
Schreiber, E. O.....Ann Arbor
Schumacker, W. E.....Ann Arbor
Scovill, H. A.....Ypsilanti
Seevers, Maurice H.....Ann Arbor
Seime, Reuben I.....Ypsilanti
Sheldon, John M.....Ann Arbor
Sibbald, Malcolm L.....Chelsea
Sink, Emory W.....Ann Arbor
Slaughter, John C.....Ann Arbor
Slenger, Walforth R.....Ypsilanti
Smalley, Marianna.....Ann Arbor
Smith, Eleanor.....Ann Arbor
Snow, Glenadine.....Ypsilanti
Solis, Jeanne C.....(E) Ann Arbor
Struthers, J. N. P.....Ann Arbor
Sturgis, Cyrus C.....Ann Arbor
Sundwall, John.....Ann Arbor
Teed, Reed Wallace.....Ann Arbor
Thieme, E. Thurston.....Ann Arbor
Thomson, Daniel C.....Ann Arbor
Towsley, Harry A.....Ann Arbor
Waggoner, R. W.....Ann Arbor
Waldron, Alexander M.....Ann Arbor
Washburne, Charles L.....Ann Arbor
Watson, Ernest Hamilton.....Ann Arbor
Wessinger, J. A.....(E) Ann Arbor
Wile, Udo J.....Ann Arbor
Wilkinson, Chas. F.....Ann Arbor
Williams, Howard R.....Ann Arbor
Williamson, F. B.....Ypsilanti
Wilson, Frank N.....Ann Arbor
Wisdom, Inez.....Ann Arbor
Woods, J. J.....Ypsilanti
Worth, Melissa H.....Ypsilanti
Wright, Walter J.....Ypsilanti
Wylie, Wm. C.....Dexter
Yoder, O. R.....Ypsilanti

Wayne County

Aaron, Charles D.....(E) Detroit
Abbott, William E.....Detroit
Abrams, Harry M.....Detroit
Abramson, Max.....Detroit
Abruzzo, Anthony M.....Detroit
Adams, James Robert.....Dearborn
Adelson, Sidney L.....Detroit
Adler, Sidney.....Detroit
Agnew, George H.....Detroit
Akroyd, Cecil.....Detroit
Albrecht, Herman F.....Detroit
Alderman, R. F.....Detroit
Aldrich, E. Gordon.....Detroit
Alexander, Eugene James.....Detroit
Alford, E. S.....Belleville
Allen, John V.....Lincoln Park
Alles, Russell W.....Detroit
Allison, Frank B.....Detroit
Allison, Herbert C.....Grosse Pointe Farms
Alpiner, Sam.....Detroit
Altman, Raphael.....Detroit
Altshuler, Abraham M.....Detroit
Altshuler, Ira M.....Detroit
Altshuler, S. S.....Army
Amberg, Emil.....(E) Detroit
Amolsch, Arthur L.....Detroit
Amos, Thomas G.....Detroit

Anderson, Bruce.....(L) Detroit
Anderson, Gordon H.....Dearborn
Anderson, J. O.....Detroit
Anderson, Walter L.....Detroit
Anderson, Walter T.....Detroit
Anderson, William.....Northville
Andries, George G.....Detroit
Andries, Joseph H.....(L) Detroit
Andries, Raymond C.....Detroit
Ankley, J. W.....Detroit
Annessa, Dommenico M.....Detroit
Anslow, Robert E.....Detroit
Appel, Phillip R.....Detroit
Appelman, H. B.....Detroit
Arehart, Burke W.....Detroit
Arent, John G.....Detroit
Armstrong, Arthur G.....Detroit
Arnold, Effie.....Detroit
Aronstam, Noah E.....(L) Detroit
Arrington, Robyn J.....Detroit
Ascher, Meyer S.....Detroit
Ashe, Stilson R.....Detroit
Ashley, L. Byron.....Detroit
Ashton, F. B.....Highland Park
Asselin, Regis F.....Detroit
Atchison, Russell M.....Northville
Athay, Roland M.....Eloise

Atler, Lawrence R.....Detroit
Atler, Leroy L.....Detroit
Aubel, M. E.....Detroit
August, Harry E.....Detroit
Auld, Douglas V.....Detroit
Avrin, Ira.....Detroit
Axelson, A. U.....Detroit
Babcock, Kenneth B.....Detroit
Babcock, L. K.....Detroit
Babcock, Myra E.....Detroit
Babcock, W. W.....Detroit
Bach, Walter F.....Detroit
Bachman, Morris E.....Detroit
Bacon, Vinton A.....Detroit
Bader, Benjamin H.....Detroit
Baer, George J.....Detroit
Baer, Raymond B.....Detroit
Baef, Michael A.....Detroit
Bagley, Harry E.....Dearborn
Bailey, Carl C.....Detroit
Bailey, Don A.....Detroit
Bailey, John H.....Detroit
Bailey, Louis J.....Detroit
Bailey, Wm. Arthur.....Detroit
Baker, Clarence.....Detroit
Bakst, Joseph.....Detroit
Balaga, F. T.....Detroit

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Balberor, Harry.....Detroit
Balcerski, Matthew A.....Detroit
Ballard, Charles S.....Detroit
Balser, Charles W.....Detroit
Baltz, James I.....Detroit
Barak, Lewis R.....Detroit
Baranowski, A. W.....Detroit
Barland, Oscar L.....Detroit
Barnes, Donald J.....Detroit
Barnes, Van D.....Detroit
Barnett, Edwin D.....Detroit
Barnett, Morton.....Detroit
Barnett, Saul E.....Detroit
Barone, Charles J.....Highland Park
Barrett, Wyman D.....Detroit
Barron, William H.....Detroit
Bartemeier, Leo H.....Detroit
Barton, J. R.....Detroit
Bates, Gaylord S.....Detroit
Bauer, Benedict J.....Detroit
Bauer, A. Robert.....Detroit
Bauer, Lester Eugene.....Detroit
Baumer, Moe.....Detroit
Baumgarten, Elden C.....Detroit
Bayles, John G.....Detroit
Beach, Watson.....Detroit
Beam, A. Duane.....Grosse Pointe
Beamer, George D.....Dearborn
Beaton, Colin.....Detroit
Beattie, Robert.....(L) Detroit
Beaver, Donald C.....Detroit
Beck, Eva F.....Eloise
Becker, Abraham.....Detroit
Becker, Joseph Wm.....Detroit
Becklein, C. L.....Detroit
Beckwith, M. C.....Detroit
Bedell, A.....Detroit
Beecher, A. J.....Detroit
Beeuwkes, L. E.....Dearborn
Behn, Claud W.....Detroit
Beigler, Sydney K.....Detroit
Belanger, Ernest E.....River Rouge
Belanger, Wm. George.....Detroit
Belknap, Warren F.....Royal Oak
Bell, J. Kenner.....Detroit
Bell, William.....Detroit
Benjamin, Wm. O.....Detroit
Bennett, Germany E.....Detroit
Bennett, Harry B.....Detroit
Bennett, Sanford A.....Detroit
Bennett, Wm. E.....Detroit
Bennett, Zina B.....Detroit
Benson, C. D.....Detroit
Benson, Davis A.....Detroit
Benson, Virginia.....Detroit
Bentley, Frederick E.....Plymouth
Bentley, Neil I.....Detroit
Beresh, Louis.....Detroit
Berge, Clarence A.....Detroit
Bergman, Murray S.....Detroit
Bergo, Howard L.....Detroit
Berke, Sydney S.....Detroit
Berkey, Wm. E.....Detroit
Berkman, Ruth.....Detroit
Berlien, Ivan C.....Detroit
Berman, Lawrence.....Detroit
Berman, Robert.....Detroit
Berman, Sidney.....Detroit
Bernard, Walter G.....Detroit
Bernbaum, Bernard.....Detroit
Bernstein, Albert E.....Detroit
Bernstein, Samuel S.....Detroit
Berry, Joseph E.....Detroit
Besancon, J. H.....Detroit
Best, John W.....Detroit
Best, T. H. Edward.....Detroit
Bicknell, Edgar A.....Detroit
Bicknell, Frank B.....Detroit
Bicknell, Nathan J.....Detroit
Birch, John R.....Detroit
Birkelo, Carl C.....Detroit
Birdsord, Leonard.....Detroit
Bittker, I. Irving.....Detroit
Bittrich, Norbert M.....Detroit
Black, Perry S.....Detroit
Blain, Alexander, III.....Ann Arbor
Blain, Alexander W.....Grosse Pointe Park
Blain, James H., Jr.....Detroit
Blaine, Max.....Detroit
Blair, K. E.....Detroit
Blanchet, Alred D.....Detroit
Blashill, James B.....Detroit
Bleier, Alfred.....Detroit
Bleier, Joseph.....Detroit
Bloch, Abraham.....Detroit
Blodgett, Wm. E.....(L) Detroit
Blodgett, William H.....Detroit
Bloom, Arthur R.....Detroit
Bloomer, Earl.....Dearborn
Blumenthal, Franz L.....Detroit
Boccaccio, John.....Detroit
Boccia, James J.....Detroit
Boddie, Lewis F.....Detroit
Boddie, Arthur W.....Detroit
Boehm, John D.....(R) West Branch

Boell, Arthur F.....Detroit
Bogue, Robert E.....Detroit
Bogusz, Ladislaus.....Eloise
Bohn, Stephen.....Detroit
Boileau, T. I.....Detroit
Bookmyer, R. H.....Detroit
Bookstein, Abraham M.....Detroit
Borstein, Sidney.....Detroit
Bott, Edmund T.....Wyandotte
Botvinick, Isadore.....Detroit
Boutrous, Thomas A.....Detroit
Bovill, E. G.....Detroit
Bower, Franklin T.....Detroit
Bowers, Leo J.....Detroit
Boyd, John H.....Trenton
Brachman, D. S.....Detroit
Bracken, Andrew H.....Dearborn
Bradley, George.....Detroit
Bradshaw, Wm. H.....Detroit
Brady, Herbert A.....River Rouge
Braitman, Louis.....Detroit
Braley, W. N.....Detroit
Bramick, Fritz W.....Detroit
Brand, Benjamin.....Detroit
Brando, Russell G.....Detroit
Brandt, Edward L.....Detroit
Braun, Lionel.....Detroit
Braverman, Morris.....Detroit
Brekke, Viola G.....Detroit
Breitenbecher, Edw R.....Detroit
Bremer, Wm. M.....Detroit
Bregle, Deane R.....Detroit
Breon, Guy L.....Detroit
Briegel, Walter A.....Detroit
Brines, O. A.....Detroit
Bringard, Elmer L.....Detroit
Brisbois, Harold J.....Plymouth
Brisson, Joseph.....Detroit
Bromme, William.....Detroit
Bronson, Wm. W.....Detroit
Brooks, A. L.....Detroit
Brooks, Clark D.....Detroit
Brooks, Charles W.....Detroit
Brooks, Nathan.....Detroit
Brosius, Wm. L.....Detroit
Broudo, Philip H.....Detroit
Brough, Glen A.....Detroit
Brown, A. O.....Detroit
Brown, Andrew G.....Detroit
Brown, Carlton F.....Detroit
Brown, Charles H.....Detroit
Brown, Frances.....Detroit
Brown, Gordon T.....Detroit
Brown, Harvey F.....Detroit
Brown, Henry S.....Detroit
Brown, John R.....Detroit
Brown, Robert A.....Detroit
Brown, Samuel.....Detroit
Brown, Stanley H.....Detroit
Brown, Thomas A.....Detroit
Brownell, Paul G.....Detroit
Bruehl, Richard.....Detroit
Bruer, Edgar S.....Ecorse
Bruer, Edwin L.....Detroit
Brunk, Andrew S.....Detroit
Brunk, C. F.....Detroit
Brunke, B. B.....Detroit
Brush, Bock Edwin.....Detroit
Bryce, John D.....Detroit
Buchanan, W. Paul.....Detroit
Buck, John D.....Detroit
Budson, Daniel.....Detroit
Buesser, Frederick G.....Detroit
Buller, H. L.....Detroit
Burbidge, Earl L.....Detroit
Burgess, Charles M.....Detroit
Burns, Robert T.....Detroit
Burnstine, Julius Y.....Detroit
Burnstine, Perry P.....Detroit
Burr, George C.....Detroit
Burr, H. Leonard.....Detroit
Burrows, Howard A.....Dearborn
Burstein, Harry S.....Detroit
Burstein, I. Marvin.....Detroit
Burstein, Morris M.....Detroit
Burton, D. T.....Detroit
Burton, I. F.....Detroit
Bush, Glendon J.....Detroit
Bush, Lowell M.....Detroit
Butler, Harry J.....(L) Detroit
Butler, L. H.....Detroit
Butler, Volney N.....Detroit
Butterworth, Herman K.....Lincoln Park
Buttrum, Edward J.....Detroit
Byers, Dudley W.....Detroit
Byington, Garner M.....Detroit
Cadieux, Henry W.....(L) Detroit
Caldwell, J. Ewart.....Detroit
Caldwell, George L.....Detroit
Calkins, H. N.....Detroit
Callaghan, T. T.....Detroit
Cameron, A. H.....Wyandotte
Cameron, Duncan A.....Detroit
Campau, George H.....Detroit
Campbell, Charles A.....Dearborn

Campbell, Darrell A.....Eloise
Campbell, Duncan.....Detroit
Campbell, Duncan A.....(L) Detroit
Campbell, Malcolm D.....Pleasant Ridge
Campbell, Mary B.....Detroit
Candler, Clarence L.....Detroit
Canter, Allie L.....Detroit
Canter, G. E.....Detroit
Cantor, M. O.....Detroit
Capano, Oreste A.....Detroit
Caputo, Joseph M.....Dearborn
Caraway, James E.....Wayne
Carbone, Louis A.....Detroit
Carey, Cornelius.....Detroit
Carleton, Lawrence H.....Detroit
Carlson, Harold W.....Detroit
Carlucci, Peter F.....Detroit
Carmichael, E. K.....Detroit
Carnes, Harry E.....Detroit
Carp, Joseph.....Detroit
Carpenter, C. H.....Detroit
Carpenter, C. J.....Detroit
Carpenter, Glenn B.....Detroit
Carpenter, William S.....Detroit
Carr, J. G.....Detroit
Carroll, E. H.....Detroit
Carroll, Lona B.....Detroit
Carrick, Lee.....Detroit
Carson, Herman J.....Detroit
Carter, John M.....Detroit
Carter, L. F.....Detroit
Cassidy, Wm. J.....Detroit
Castrop, C. W.....Dearborn
Catherwood, A. E.....Detroit
Caton, Dorothy.....Detroit
Caughey, E. H.....Detroit
Caumartin, Fred E.....Detroit
Cavell, Roscoe W.....Detroit
Chabut, V. George.....Northville
Chall, Henry G.....Detroit
Chance, J. H.....Detroit
Chapin, Sidney E.....Dearborn
Chapman, Aaron L.....Detroit
Chapman, Paul T.....Detroit
Chapnick, H. A.....Detroit
Charnas, Sidney.....Detroit
Chase, Clyde H.....Detroit
Chatel, Arthur N.....Detroit
Chesluk, H. M.....Detroit
Chester, W. P.....Detroit
Childs, George M.....Detroit
Chipman, W. A.....Detroit
Chittenden, George E.....Detroit
Chittick, Wm. R. (E) Spring Valley, Cal.
Chostner, G. C.....Detroit
Christensen, C. A.....Dearborn
Christopher, James G.....Detroit
Chrouch, Laurence A.....Detroit
Church, Aloysius.....Detroit
Cioffari, Mario S.....Detroit
Ciprian, Joseph E.....Detroit
Clark, Benjamin W.....Detroit
Clark, C. M.....Ecorse
Clark, Donald V.....Detroit
Clark, George E.....(E) Detroit
Clark, Harold E.....Detroit
Clark, Harry G.....Detroit
Clark, Harry L.....Detroit
Clarke, Norman E.....Detroit
Clifford, Charles H.....Detroit
Clifford, John E.....Detroit
Clifford, Thomas P.....Detroit
Clinnert, J. C.....Grosse Ile
Clyde, Ensign.....Ann Arbor
Coan, Glenn L.....Wyandotte
Coates, Carl Amos.....Dearborn
Cobane, John H.....Detroit
Cochrane, Edgar G.....Detroit
Cohen, H. Herbert.....Detroit
Cohn, Daniel E.....Detroit
Cohoe, Don E.....Detroit
Cole, Fred H.....Detroit
Cole, James E.....Detroit
Cole, Wyman C. C.....Detroit
Coleman, Margaret W.....Detroit
Coleman, William G.....Redford
Coll, Howard R.....Detroit
Collings, M. Raymond.....Detroit
Collins, James D.....Detroit
Colvert, James R.....Detroit
Colvin, Leslie T.....Detroit
Colyer, Raymond G.....Detroit
Comfort, Milton D.....Flat Rock
Comstock, Lawrence.....Trenton
Condon, Stanley.....Detroit
Conley, L. C. M.....Detroit
Conn, Harold.....Detroit
Conn, Raymond W.....Detroit
Connelly, Richard C.....Detroit
Conner, Edward D.....Highland Park
Connolly, Frank.....Detroit
Connolly, John P.....Detroit
Connolly, Paul J.....Detroit
Connors, J. J.....Detroit
Conrad, E. R.....Detroit

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Constable, Canute G. Detroit
Cook, James C. Dearborn
Cooksey, Warren B. Detroit
Coolidge, Maria Belle (L.) Grosse Pt. Pk.
Cooper, B. J. Detroit
Cooper, E. L. Detroit
Cooper, James B. Detroit
Cooper, Ralph R. Detroit
Corbeille, Catherine. Detroit
Coseglia, Robert P. Detroit
Cosgrove, Wm. J. Detroit
Costello, Russell T. Detroit
Cotruro, L.D. Detroit
Cotton, S. O. Detroit
Coulcke, Henry O. Ferndale
Coulter, Wm. J. Detroit
Courville, Charles J. Detroit
Cowan, Wilfrid. Detroit
Cowen, Leon B. Detroit
Cowen, Robert L. Detroit
Cowley, Leonard L. Detroit
Coyne, Douglas R. Detroit
Crane, Langdon T. Detroit
Crane, Thomas P. Dearborn
Crawford, Albert S. Detroit
Cree, Walter J. (E) Detroit
Crews, Thomas H. Detroit
Croll, L. J. Detroit
Croll, Maurice. Detroit
Crook, Charles L. Highland Park
Cross, Harold E. Detroit
Crossen, Henry F. Detroit
Croushore, J. E. Detroit
Cruikshank, Alexander. (E) Detroit
Culp, Ormond. Detroit
Curhan, Joseph H. Detroit
Curry, F. S. Detroit
Curtis, Frank E. Detroit
Cushing, Russell G. Detroit
Cushman, H. P. Detroit
Cusick, Paul L. Detroit

Dale, Esther H. Detroit
Dale, Mark. Detroit
Danforth, J. C. Detroit
Danforth, Mortimer E. Detroit
Daniels, L. E. Detroit
Darling, Milton A. Detroit
Darpin, Peter H. Detroit
Dart, Edward. Detroit
Davidow, David M. Detroit
Davidson, Harry O. Detroit
Davies, Thomas S. Detroit
Davies, Windsor S. Detroit
Davis, Egbert F. Wyandotte
Davis, George H. Detroit
Davis, Wm. H. Detroit
Dawson, F. E. Detroit
Dawson, Ralph. Detroit
Dawson, W. A. Inkster
Day, A. Jackson. Detroit
Day, J. Claude. Detroit
Deering, Robert James. Ecorse
Defever, Cyril R. Detroit
Defnet, Wm. A. Detroit
De Jongh, Edwin. Detroit
Demaray, John F. Detroit
Demster, James H. (L) Detroit
De Nike, A. James. Detroit
Denis, George M. Detroit
De Ponio, Sylvester A. Detroit
Derby, Arthur P. Detroit
Deresz, Alphonse. Detroit
Dierleth, Paul E. Detroit
De Rosier, Joseph L. Detroit
De Snelder, Ray E. Detroit
De Tomasi, Rome Q. Detroit
Dibble, Harry F. Detroit
Dickson, B. R. Detroit
Dickson, Elias L. Detroit
Diebel, Nelson W. Detroit
Dietzel, H. O. Detroit
Dill, Hugh L. Detroit
Dill, J. Lewis. Detroit
Di Loreto, Panfilo C. Detroit
Dittmer, Edwin. Detroit
Dixon, Fred W. Dearborn
Dixon, Ray S. Detroit
Dixon, Robert K. Detroit
Dodds, John C. Detroit
Dodenhoff, C. F. Detroit
Dodrill, F. D. Detroit
Doerr, Louis E., Jr. Detroit
Dolega, Stanley F. Detroit
Dolman, E. Nesbitt. Detroit
Domzalski, C. A. Detroit
Donald, Douglas. Detroit
Donovan, Daniel R., Jr. Detroit
Donovan, Richard S. Detroit
Dorsey, John M. Detroit
Doty, Chester A. Detroit
Doub, Howard P. Detroit
Douglas, Bruce H. Detroit
Douglas, Clair L. Detroit
Dovitz, Benjamin W. Detroit
Dow, Roy E. Detroit

Dowdle, Edward. Detroit
Downer, Ira G. Detroit
Doyle, George H. Detroit
Drake, Ellet H. Detroit
Drake, James J. Detroit
Draves, Edward F. Detroit
Drews, Robert S. Detroit
Drinkhaus, Harold I. Detroit
Droock, Victor. Detroit
Drummond, Donald L. Detroit
Dubin, Joseph J. Detroit
Dubnove, Aaron. Detroit
Du Bois, Paul W. Detroit
Duburnell, Karl. (E) Detroit
Duburnell, Martin S. Detroit
Duffy, Edward A. Detroit
Dundas, Edw. M. Detroit
Dunlap, Henry A. Detroit
Dunlap, Samson F. Detroit
Dunn, Cornelius E. Detroit
Durocher, Edmund J. Ecorse
Dutchess, Charles E. New York City
Dwaihy, Paul. Detroit
Dwyer, Francis. Detroit
Dziuba, John F. Detroit

Eades, Charles C. Detroit
Eadie, Gordon A. Detroit
Eakins, Frederick J. Detroit
Eaton, Crosby D. Detroit
Eder, Joseph R. Detroit
Eder, Samuel J. Detroit
Edgar, Irving I. Detroit
Edgar, Russell G. Detroit
Edmonds, W. N. Detroit
Edwards, Gilbert L. Detroit
Edwards, J. W. Detroit
Eisman, Clarence H. Detroit
Eldridge, Edward F. Detroit
Ellias, Elmer P. Dearborn
Elliott, Wm. G. Detroit
Elman, Meyer J. Detroit
Elvidge, Robert J. Detroit
Emmert, Herman C. (L) Detroit
Engel, Earl H. Wyandotte
English, Leo V. Detroit
Eno, Laurel S. Detroit
Ensign, Dwight C. Detroit
Ensing, Osborn. Detroit
Epstein, S. G. Detroit
Erickson, Eldon W. Detroit
Erickson, Milton H. Ecorse
Erkfitz, Arthur W. Detroit
Erman, Joseph M. Detroit
Eschbach, Joseph W. Dearborn
Estabrook, Bert U. Detroit
Ettinger, Clayton J. Detroit
Evans, Joseph M. Detroit
Evans, Leland S. Redford
Evans, William A., Jr. Detroit
Ewing, C. H. Grosse Pte. Village

Fagin, Irving D. Detroit
Fagin, Joseph. Detroit
Fair, Baxter B. Detroit
Falick, M. L. Detroit
Falk, Ira E. Detroit
Fallis, Lawrence S. Detroit
Fandrich, Theodore. Detroit
Farbman, Aaron A. Detroit
Farbman, Simon S. Detroit
Fauman, David H. Detroit
Faunce, Sherman P. Detroit
Feeley, Marshall J. Detroit
Felcyn, W. George. Detroit
Feld, David. Detroit
Feldkamp, Lee E. Detroit
Feldman, Paul. Detroit
Feldstein, Martin Z. Detroit
Fellers, Ray L. Detroit
Fenech, Harold B. Detroit
Fenner, Wm. A. Detroit
Fenner, Wm. G. Detroit
Fenton, E. H. Detroit
Fenton, Meryl M. Detroit
Fenton, Russell F. Detroit
Fenton, Stanley C. Detroit
Ferrera, Louis V. Detroit
Ferrara, Virginia M. Detroit
Fettig, Carl A. Grosse Pointe Park
Finch, Alvis D. Detroit
Finch, F. Sinclair. Detroit
Fine, Edward. Detroit
Fischer, Frederick J. St. Clair
Fisher, George S. Detroit
Fisher, O. O. Detroit
Fisher, R. L. Detroit
Fitzgerald, James M. Detroit
Fitz Porter, A. L. Dearborn
Flaherty, H. J. Detroit
Flaherty, N. W. Detroit
Fleming, L. N. Detroit
Flora, Wm. R. Detroit
Flower, J. A. Detroit
Fogt, Herbert E. Detroit
Fogt, Robert G. Detroit
Foley, Hugh S. Dearborn

Foley, Joseph M. Detroit
Font, Anthony J. Detroit
Foote, James A. Lincoln Park
Ford, George A. Detroit
Ford, Sylvester. Detroit
Ford, Walter D. Detroit
Fordell, F. S. Detroit
Forrester, Alex V. Detroit
Forsythe, John R. Detroit
Foster, E. Bruce. Detroit
Foster, Daniel P. Detroit
Foster, Linus J. Detroit
Foster, Owen C. Detroit
Foster, Wm. L. Detroit
Foster, W. M. Detroit
Fowler, Melvin E. Detroit
Fox, Morris Edward. Detroit
Fraiberg, Paul L. Detroit
Franjac, M. J. Dearborn
Franklin, James. Detroit
Franklin, John. Detroit
Franzen, Nils A. Detroit
Fraser, Eldred E. Detroit
Frazer, Mary Margert. Detroit
Free, Harry W. Detroit
Freedman, John. Detroit
Freedman, Milton. Detroit
Freeman, B. F. Detroit
Freeman, D. K. Detroit
Freeman, Mabel. Detroit
Freeman, Michael. Detroit
Freeman, Thelma. Detroit
Freeman, Wilmer. Detroit
Freese, John A. Detroit
Freid, Samuel. Detroit
Fremont, Joseph C. Detroit
Freund, Hugo A. Detroit
Fried, Bernard H. Detroit
Friedlaender, Alex S. Detroit
Friedlaender, Sidney. Detroit
Friedman, David. Detroit
Friedman, I. H. Detroit
Frothingham, George E. (E) Detroit
Frund, Henrietta. Detroit
Fulgenzi, Andrew A. Detroit
Fullenwider, Allan C. Detroit
Fuller, Hugh M. Detroit
Fulton, Wm. James. Detroit

Gaba, Howard. Detroit
Gabe, Sigmund. Los Angeles, Calif.
Gaberman, David B. Detroit
Gaffney, J. Mitchell. Detroit
Galantowicz, H. C. Detroit
Galdonyi, Laslo L. Detroit
Galdonyi, Nicholas. Detroit
Galerneau, D. B. Center Line
Galvin, Paul P. Detroit
Gamble, Parker B. Detroit
Gannan, Arthur M. Detroit
Ganschow, John H. Detroit
Gardner, Lawrence. Detroit
Garipey, Louis J. Detroit
Garner, Howard B. (E) Detroit
Gaston, Herbert B. Detroit
Gates, Nathaniel H. Detroit
Gaynor, Alex. Detroit
Gehring, Harold W. Detroit
Gehrke, August E. Birmingham
Geib, Ledru O. Detroit
Geib, Wayne A. Grosse Pointe Park
Geiter, Clyde W. Detroit
Geitz, Wm. A. Detroit
Gelbach, Philip D. Detroit
Gellert, I. S. Detroit
Gemero, J. C. Detroit
Gerondale, Edmond J. Detroit
Gibson, James C. (E) Detroit
Giese, Fred W. Detroit
Gigante, Nicola. Detroit
Gilbert, Harold R. Wyandotte
Gillespie, Stephen M. Dearborn
Gillman, R. W. (E) Detroit
Gingold, Samuel M. Detroit
Ginsberg, Harold I. Detroit
Gitlin, Charles. Detroit
Gitlin, Julius R. Detroit
Gittins, Perry C. Detroit
Glasgow, Gordon K. Detroit
Glassman, Samuel. Detroit
Glazer, Walter S. Detroit
Gleason, John E. Detroit
Glees, J. L. Grosse Pointe Farms
Glement, Raymond B. Detroit
Glowacki, B. F. Detroit
Gmeiner, Clarence C. Detroit
Goerke, Elmer A. Romulus
Goetz, Angus G. Detroit
Goins, Wm. F. Detroit
Goldberg, Arthur. Detroit
Goldberg, Harry H. Detroit
Goldberg, Nathan. Detroit
Goldin, M. I. Ecorse
Goldman, Aubrey. Detroit
Goldsmith, Joseph D. Detroit
Goldstone, R. R. Detroit

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Gollman, Maurice D.	Detroit
Gonne, Wm. S.	Detroit
Goodrich, B. E.	Detroit
Gordon, John W.	(R) Detroit
Gordon, William H.	Detroit
Gorelick, Martin J.	Dearborn
Gorning, Raymond P.	Detroit
Goryl, Stephen V.	Detroit
Goss, Samuel B.	Detroit
Gottschalk, Fred W.	Detroit
Gould, S. E.	Detroit
Gourley, E. V.	Eloise
Goux, Louise J.	Detroit
Goux, R. S.	Detroit
Grace, J. M.	Detroit
Graff, J. M.	Detroit
Graham, Julius A.	Detroit
Grain, Gerald O.	Detroit
Grajewski, Leo E.	Detroit
Gramley, Wm.	Detroit
Granger, Francis L.	Detroit
Gratton, Henri L.	Detroit
Gravelle, Lawrence J.	Detroit
Green, Ellis R.	Detroit
Green, Lewis	Detroit
Green, Louis M.	Detroit
Green, Nelson W.	Pleasant Ridge
Green, Simpson W.	Detroit
Greenberg, Jack R.	Detroit
Greenberg, Julius J.	Detroit
Greenberg, Morris Z.	Detroit
Greene, John B.	Detroit
Greenidge, Robert	Detroit
Greenlee, Wm. Tate.	Detroit
Greiner, Bert A.	Detroit
Grekin, John N.	Detroit
Grekin, Samuel L.	Detroit
Griffith, Arthur J.	Detroit
Grillo, S. Phillip.	Belleville
Grimaldi, G. J.	Detroit
Grinstein, Alexander	Detroit
Grob, Otto.	Detroit
Grossman, Sol.	Detroit
Cruber, T. K.	Eloise
Guimaraes, A. S.	Dearborn
Gurdjian, E. S.	Detroit
Gutow, Benjamin R.	Detroit
Haefele, Leslie P.	Garden City
Haking, Leonard	Detroit
Hale, Arthur S.	Detroit
Hall, Archie C.	Detroit
Hall, E. Walter.	Detroit
Hall, James A. J.	Detroit
Hall, Ralph E.	Detroit
Hall, Robert J.	Detroit
Haluska, Joseph A.	Detroit
H'Amada, Norman K.	Detroit
Hamburger, A. C.	Detroit
Hamil, Brenton M.	Detroit
Hamilton, Norman C.	Detroit
Hamilton, William	Detroit
Hamilton, Wm. F.	(L) Detroit
Hammer, Edwin J.	Detroit
Hammer, Howard J.	San Francisco, Cal.
Hammond, A. E.	Detroit
Hammond, James L.	Inkster
Hand, Fordus V.	Detroit
Hanna, E. Howard.	Detroit
Hansen, Frederick E.	Detroit
Hanser, Joshua	(L) Detroit
Hanson, Frederick N.	Wayne
Hanson, Joseph	Detroit
Harelik, E. W.	Detroit
Hardstaff, R. John.	Detroit
Hardy, George C.	Detroit
Harley, Garth H.	Detroit
Harley, Louis M.	Detroit
Harm, W. B.	Detroit
Harper, Jesse T.	Detroit
Harrell, Voss	Detroit
Harris, Harold H.	Detroit
Harris, Ivor D.	Detroit
Harrison, Hugh	(E) Detroit
Harrison, Wesley	Detroit
Hart, Charles E.	Detroit
Hart, J. Clarence	Detroit
Hartmann, W. B.	Detroit
Hartzell, John B.	Detroit
Hasley, Clyde K.	Detroit
Hasley, Daniel E.	Detroit
Hassig, Walter W.	Detroit
Hastings, Orville J.	Detroit
Hause, Glen E.	Detroit
Hauser, I. Jerome	Detroit
Hauser, John E.	Detroit
Hauser, Maurice	Detroit
Havers, Howard	Detroit
Hawkins, James W.	Detroit
Hayes, Joseph D.	Detroit
Heath, Leonard P.	Detroit
Heath, Parker	Bloomfield Hills
Heavner, L. E.	Detroit
Hecht, Manes.	Detroit
Hedgeman, E. C.	Detroit
Hedges, Frank W.	Detroit

Hedrick, Donald W.	Detroit
Heenan, T. H.	Detroit
Heideman, Louis.	Detroit
Heldt, Thomas J.	Detroit
Hendelman, Manuel H.	Detroit
Henderson, A. B.	Detroit
Henderson, Harold.	Detroit
Henderson, Leslie T.	Detroit
Henderson, Wm. E.	Detroit
Henig, Fred.	Detroit
Henrich, L. E.	Detroit
Herkimer, Dan R.	Lincoln Park
Herrold, Rose E.	Detroit
Herschelman, Roy F.	Detroit
Hershey, Lynn N.	Birmingham
Hewitt, Leland V.	Detroit
Hewitt, Robert S.	Dearborn
Heyner, Stanley A.	Detroit
Hickey, Joseph.	Detroit
Hicks, Fred G.	Dearborn
Hiebert, J. M.	Detroit
Higbee, Arthur L.	Detroit
Hilleman, Lee	Detroit
Hillenbrand, Alfred E.	Ecorse
Hillenbrand, Carl M.	Grosse Pointe
Hiller, Glenn I.	Detroit
Hilton, Wm. E.	Detroit
Hinko, Edward N.	Eloise
Hirschfield, Alexander H.	Detroit
Hirschman, L. J.	Detroit
Hochman, Morton M.	Detroit
Hodgkinson, C. P.	Detroit
Hodoski, Frank J.	Detroit
Hoenig, Andrew L.	Mancelona
Hoffman, E. S.	Detroit
Hoffman, Edward A.	Detroit
Hoffman, Harry Y.	Detroit
Hoffman, Henry A.	Detroit
Hoffmann, Martin H.	Detroit
Holcomb, August A.	Northville
Holcomb, Clayton E.	Detroit
Hollander, A. J.	Detroit
Hollis, Henry B.	Detroit
Holloway, Horace R.	Detroit
Holman, Herbert H.	Detroit
Holmes, Alfred W.	Detroit
Holt, Henry T.	Detroit
Honhart, Fred L.	Detroit
Honor, Wm. H.	Wyandotte
Hookey, J. A.	Wyandotte
Hooper, Norman L.	Detroit
Hoops, George B.	Detroit
Hopkins, J. E.	Detroit
Horan, Thomas.	Detroit
Horkins, Harold A.	Detroit
Horny, Hugo.	Detroit
Horton, Reece H.	Detroit
Horvath, Louis O.	Detroit
Horwitz, John B.	Detroit
Hotchkiss, Loris M.	Farmington
Howard, Austin Z.	Detroit
Howard, Phillip J.	Detroit
Howell, Bert F.	Detroit
Howes, Homer Allen.	Detroit
Howes, Willard Boyden.	Detroit
Howlett, Howard T.	Detroit
Hromadko, Louis.	Detroit
Hubbard, John P.	Detroit
Hubbard, Ralph G.	Detroit
Hudson, J. Stewart.	Grosse Pointe
Hudson, Wm. A.	Detroit
Huegli, Wilfred A.	Detroit
Huff, Reginald G.	Wayne
Hughes, Albert A.	(L) Detroit
Hull, L. W.	Detroit
Hunt, T. H.	Detroit
Hunt, Verne G.	Detroit
Hunter, Basil H.	Detroit
Hunter, Elmer N.	Detroit
Husband, Charles W.	Detroit
Hussey, Raymond.	Detroit
Hyatt, Jarvis M.	Dearborn
Hyde, Frederick W.	Detroit
Hyman, S. J.	Inkster
Iacobell, Peter H.	Detroit
Igna, Eli J.	Detroit
Ignatius, A. A.	Detroit
Ihle, Lyman E.	Detroit
Insey, Stanley W.	Chippewa Falls, Wis.
Irvin, Earle Albert.	Detroit
Irwin, W. A.	Detroit
Israel, Barney B.	Detroit
Israel, J. G.	Detroit
Iwata, Herbert.	Detroit
Jackson, George F.	Detroit
Jacobson, Samuel D.	Detroit
Jacoby, Myron D.	Detroit
Jaeger, Grove A.	Detroit
Jaeger, Julius P.	(L) Detroit
Jael, C. N.	Detroit
Jaffar, Donald J.	Detroit
Jaffe, I. L.	Detroit
Jaffe, Jacob.	Detroit
Jaffe, Louis.	Detroit
Jahsman, William E.	Detroit

James, Richard G.	Detroit
Jamieson, Thomas J.	Lincoln Park
Janicki, Natalia J.	Eloise
Jarre, Hans A.	Detroit
Jarvis, Harold	Detroit
Jarzembowski, F. B.	Detroit
Jarzynka, Frank J.	Detroit
Jasion, Lawrence J.	Dearborn
Jend, Wm.	Detroit
Jenkins, E. A.	(L) Detroit
Jenne, Byron H.	Detroit
Jennings, Robert M.	Dearborn
Jentgen, Charles J.	Detroit
Jentgen, L. G.	Detroit
Jenton, O. Henry	Detroit
Jeremias, Robert C.	Detroit
Jewell, F. C.	Detroit
Jocz, M. W.	Grosse Pointe Park
Jodar, E. O.	Detroit
John, Hubert R.	Detroit
Johnson, Homer L.	Detroit
Johnson, Ralph A.	Detroit
Johnson, Vernon P.	Detroit
Johnson, Vincent C.	Detroit
Johnson, W. H. M.	Detroit
Johnston, Charles G.	Detroit
Johnston, Everett V.	Detroit
Johnston, J. A.	Detroit
Johnston, John L.	Detroit
Johnston, Wm. E.	Detroit
Johnstone, Benjamin I.	Detroit
Joinville, E. V.	Detroit
Jones, Adrian R.	Detroit
Jones, Arthur J.	Detroit
Jones, Edna M.	Detroit
Jones, L. Faunt.	Northville
Jones, Roy D.	Detroit
Jordan, R. Gerald.	Detroit
Joyce, Stanley J.	Detroit
Juliar, Benjamin	Detroit
Juwrow, Harry N.	Detroit
Kalayjian, Bernard S.	Detroit
Kallet, Herbert I.	Detroit
Kallman, David	Detroit
Kallman, Leo	Detroit
Kallman, R. Robert	Detroit
Kaminski, Zeno L.	Detroit
Kamperman, George A.	Detroit
Kanter, Herman	Detroit
Kapetansky, A. J.	Detroit
Kapetansky, Nathan J.	Detroit
Kapлита, Walter A.	Hamtramck
Karr, Herbert S.	Detroit
Kasabach, Harry Y.	Detroit
Kasabach, V. Y.	Detroit
Kasper, Joseph A.	Detroit
Kass, Arnold	Detroit
Kass, J. B.	Detroit
Kates, Simon C.	Detroit
Katzman, I. S.	Detroit
Kaump, Donald H.	Detroit
Kauppinen, J. A.	Detroit
Kay, Edward W.	Hamtramck
Kazdan, Louis	Detroit
Kazdan, Morris A.	Allen Park
Keane, Wm. E.	Allen Park
Keating, Thomas F.	Detroit
Kehoe, Henry J.	East Detroit
Keim, H. L.	Detroit
Kelmenson, V. A.	Detroit
Kelson, Malcolm J.	Detroit
Kemler, Walter J.	Escore
Kemp, Hardy A.	Detroit
Kennary, James M.	Detroit
Kennedy, Charles S.	Detroit
Kennedy, Donald J.	Detroit
Kennedy, Lester F.	Detroit
Kennedy, Robert B.	Detroit
Kern, W. H.	Garden City
Kernkamp, Ralph	Detroit
Kernick, M. O.	Detroit
Kersten, Armand G.	Detroit
Kersten, Werner	Detroit
Kerzman, Joseph H.	Detroit
Keshishian, Sarkis K.	Detroit
Keyes, Eugene Charles	Dearborn
Keyes, John W.	Detroit
Kibzey, Ambrose T.	Sault Ste. Marie
Kidner, Frederick C.	Detroit
Kimberlin, Kenneth K.	Detroit
King, Edward D.	Detroit
King, Melbourne J.	Detroit
Kingswood, Roy C.	Detroit
Kinsley, George	Detroit
Kirchner, Augustus	Detroit
Kirker, J. G.	Detroit
Kirschbaum, Harry M.	Detroit
Klebba, Paul	Detroit
Klein, William	Detroit
Kleinman, S.	Detroit
Kliger, David	Detroit
Kline, Lewis Le Roy	Detroit
Kline, Starr L.	Detroit
Klosowski, Joseph	Detroit
Klote, M. D.	Detroit

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Knaggs, Charles W. Grosse Pointe
Knaggs, Earl J. Wyandotte
Knapp, Byron S. River Rouge
Knapp, Floyd. Detroit
Knobloch, Edmund J. Detroit
Knoch, Hubert S. Detroit
Knox, Ross M. Escorse
Koebel, R. H. Detroit
Koerber, Edward J. Detroit
Koessler, George L. Detroit
Kohn, M. E. Detroit
Kokowicz, Raymond J. Detroit
Kolasa, W. B. Detroit
Kopel, Joseph O. Detroit
Korby, George J. Detroit
Koren, Louis. Eloise
Kossayda, Adam W. Detroit
Koster, Koert. Detroit
Kovach, Emery P. Detroit
Kovan, D. D. Detroit
Koven, Abraham. Detroit
Kozlinski, Anthony E. Detroit
Kozlow, Louise E. Detroit
Kraft, Raymond B. Detroit
Kraft, Ruth M. Detroit
Krass, Edward W. Detroit
Kraus, John J. Detroit
Krebs, William T. Detroit
Kreinbring, George E. Detroit
Kretschmar, Clarence A. Detroit
Kretschmar, John C. Detroit
Krieg, Earl G. Detroit
Krieger, Harley L. Detroit
Kritchman, M. J. Detroit
Kroha, Lawrence. Detroit
Krohn, Albert H. Detroit
Krynicky, Francis X. Detroit
Kubanek, Joseph L. Dearborn
Kucmierz, Francis S. Detroit
Kuhn, Albert A. Detroit
Kuhn, Richard F. Detroit
Kulaski, Chester H. Detroit
Kullman, Harold J. Dearborn
Kurcz, J. A. Detroit
Kurtz, I. J. Detroit
Kwasiborski, S. A. Wyandotte
LaBerge, James M. Wyandotte
La Bine, Alfred C. Detroit
La Core, Ivan. Detroit
La Ferte, Alfred D. Detroit
Lakoff, Charles. Detroit
Lam, Conrad R. Detroit
Lamberson, Frank A. Detroit
La Marche, Norman O. Detroit
Lammy, James V. Detroit
Lampman, H. H. Detroit
Landers, M. B., Sr. Detroit
Landers, M. B., Jr. Detroit
Lang, Ernst Frederick. Detroit
Lang, Leonard W. Detroit
Lange, Anthony H. Detroit
Laning, George M. Detroit
Lansky, Mandell. Detroit
Lapham, Fred E. Detroit
Larsson, Bror H. Detroit
Lasley, James W. Detroit
Lassaline, S. J. Detroit
Lathrop, Philip L. Detroit
Latteier, K. K. Detroit
Laub, Stanley V. Detroit
Lauppe, Edward H. Detroit
Lauppe, F. A. Detroit
Laurisin, Eugene. Detroit
Lazar, Morton R. Detroit
Leach, David. Detroit
Leacock, Robert C. Detroit
Leader, L. R. Detroit
Leaver, L. Ross. Detroit
Leckie, George C. Detroit
Ledwidge, Patrick L. Detroit
Lee, Harry E. Detroit
Le Gallee, George M. Detroit
Leibinger, Henry R. Detroit
Leipsitz, Louis S. Detroit
Leiser, Rudolf. Eloise
Leithausen, D. J. Detroit
Leland, Sol. Detroit
Lemley, Clark. Detroit
Lemmon, Charles E. Detroit
Lemmon, Clarence W. River Rouge
Lentine, James J. Detroit
Lenz, Willard R. Detroit
Lepard, C. W. Detroit
Leppley, Fred O. Detroit
Lerman, S. E. Van Dyke
Lescohier, Alex W. Grosse Pointe
L'Esperance, Simon P. Detroit
Leszynski, J. S. Detroit
Leucutia, Traian. Detroit
Levant, Arthur B. Detroit
Levin, David M. Detroit
Levin, Michael. Detroit
Levin, Samuel J. Detroit
Lewine, Edward E. Detroit
Levine, Sidney S. Detroit

Levitt, Edward J. Detroit
Levitt, Nathan. Detroit
Levy, Marvin B. Detroit
Lewis, Charles T. Detroit
Lewis, J. Hugh. Wyandotte
Lewis, L. A. Detroit
Libbrecht, Robert V. Dearborn
Lichtwardt, Hartman A. Detroit
Liddicoat, A. G. Detroit
Lieberman, B. L. Detroit
Lightbody, James J. Detroit
Lignell, Rudolph. Detroit
Lilly, Charles J. Detroit
Linn, Frank D. Detroit
Linton, James R. Eloise
Lipinski, Stanley L. Detroit
Lipkin, Ezra. Detroit
Lippold, Paul H. Detroit
Lipton, Raymond. Detroit
Lipshutz, Louis. Eloise
Littlejohn, David. Eloise
Livingston, George D. Detroit
Livingston, George M. (R) Detroit
Llewellyn, M. B. Detroit
Lockwood, Bruce C. Detroit
Loftrom, James E. Detroit
Long, Earle C. Detroit
Long, John J. Detroit
Longyear, Harold W. Detroit
Lookanoff, Victor A. Detroit
Loranger, C. B. Detroit
Lorber, Joseph H. Detroit
Lorentzen, Edwin H. Detroit
Lovas, W. S. Detroit
Love, W. Thomas. Detroit
Lovell, B. K. Detroit
Lowe, Adolf. Detroit
Lowe, Townsend. Detroit
Lowrie, G. B. (L) Grosse Pointe
Lowrie, Wm. L., Jr. Detroit
Lowry, George L. Detroit
Luce, Henry A. Detroit
Lukas, John R. Detroit
Lum, Thomas K. Williams Field Ariz.
Lutz, Earl F. Detroit
Lynn, David H. Detroit
Lynn, Harvey D. Detroit
Lyons, L. Mason. Detroit
Lyons, Wm. Harrington. Detroit
Lytle, Robert P. Detroit
Mabee, Frank P. Detroit
Mabley, J. Donald. Detroit
MacArthur, Robert A. Detroit
MacCracken, Frances L. Detroit
MacDougall, Orrin P. Detroit
MacFarlane, Howard W. Detroit
MacGregor, W. W. Detroit
Mack, Harold C. Detroit
MacKenzie, Earle D. Detroit
MacKenzie, Edward P. Detroit
MacKenzie, Frank M. Detroit
MacKenzie, John W. Grosse Pointe
Mackersie, W. G. Detroit
MacMillan, Francis B. Detroit
MacMullen, Frank B. Detroit
MacQueen, Malcolm D. Detroit
MacPherson, K. C. Detroit
Maczewski, John E. Detroit
Madsen, Martha. Detroit
Magnell, Ralph C. Detroit
Maguire, Clarence E. Detroit
Mahoney, Hugh M. Detroit
Maibauer, F. P. Wyandotte
Maino, L. J. Detroit
Mains, M. Paul. Detroit
Maire, E. D. Grosse Pointe
Mair, Harold U. Detroit
Malachowski, B. T. Detroit
Malik, Edward A. Detroit
Malik, Nur M. Detroit
Malina, Stephen. Detroit
Maloney, John A. Detroit
Mancuso, Vincent. Detroit
Mandiberg, Jack N. Detroit
Manning, Morey H. Detroit
Maples, Douglas E. Detroit
Marcotte, Oliver. Detroit
Marcus, Daniel B. Detroit
Marinus, Carleton J. Detroit
Mark, Jerome. Detroit
Markoe, Rupert C. L. Detroit
Marks, Ben. Detroit
Marks, Morris. Detroit
Marsden, Thomas B. Detroit
Marsh, Alton R. Detroit
Marshall, James R. Detroit
Marshall, Millard R. Detroit
Martin, Edward G. Detroit
Martin, Elbert A. Detroit
Martin, I. Herbert. Detroit
Martin, J. B., Jr. Detroit
Martin, L. R. Detroit
Martin, Peter A. Detroit
Martin, R. M. Detroit
Martin, Richard D. Detroit

Martin, Wilbur C. Detroit
Martinez, P. O. Detroit
Martner, Edgar. Detroit
Marwil, T. B. Detroit
Mason, Percy W. Detroit
Mateer, John G. Detroit
Mathes, Charles J. Detroit
Matthews, Wallace. Detroit
Maun, Mark E. Detroit
Maxwell, J. Harvey. Detroit
May, Frederick T., Jr. Detroit
Mayer, E. V. Detroit
Mayer, Willard D. Detroit
Maynard, Fred M. Allen Park
Mayne, Cecil H. Detroit
McAfee, F. W. Detroit
McAlonan, Wm. T. Detroit
McAlpine, Archibald D. Detroit
McAlpine, Gordon S. Detroit
McBroom, Russell E. Detroit
McClellan, Robert J. Detroit
McClendon, James J. Detroit
McClintock, J. J. Detroit
McClure, Robert W. Detroit
McClure, Roy D. Detroit
McClure, Wm. R. Detroit
McColl, Charles W. Wyandotte
McColl, Clarke M. Detroit
McColl, Kenneth M. Detroit
McCollum, E. B. Detroit
McCord, Carey P. Detroit
McCormick, Colin C. Dearborn
McCormick, C. W. Detroit
McCullough, Lester E. Detroit
McDonald, Angus L. Detroit
McDonald, George O. Detroit
McDonald, Grant. Highland Park
McDonald, Peter W. Wyandotte
McDougall, B. Wm. Detroit
McEvitt, Wm. G. Detroit
McFadyen, Hugh A. Detroit
McGarvah, A. W. Detroit
McGarvah, Joseph A. Detroit
McGhee, Richard S. Detroit
McGillicuddy, Walter E. Detroit
McGinnis, Daniel H. Detroit
McGlaughlin, Nicholas D. Wyandotte
McGough, Joseph M. Detroit
McGrath, Neil B., Jr. Detroit
McGraw, Arthur B. Detroit
McGuire, Ivan A. Detroit
McGuire, M. Ruth. Detroit
McIntosh, Wm. V. Detroit
McIntyre, Wm. D. Detroit
McKean, G. Thomas. Detroit
McKean, Richard M. Detroit
McKenna, Charles J. Detroit
McKinley, Donald. Detroit
McKinnon, John D. Detroit
McLane, Harriett E. Detroit
McLean, Don W. Detroit
McLean, Harold G. Detroit
McPherson, E. Glenn. Dearborn
McPherson, R. J. Detroit
McQuiggan, Mark R. Detroit
McRae, Donald H. Detroit
Mead, John. Detroit
Meinecke, H. A. Detroit
Mellen, Hyman S. Detroit
Melnik, Maxim P. Detroit
Menagh, Frank R. Detroit
Mendelssohn, R. J. Detroit
Merkel, Charles C. Grosse Pointe
Merrill, Wm. O. Detroit
Merriman, K. S. Detroit
Merritt, Earl G. Detroit
Metzger, Harry C. Detroit
Meyer, Ruben. Detroit
Meyers, M. P. Detroit
Meyers, Solomon G. Detroit
Miley, H. H. Detroit
Millard, Glenn E. Detroit
Miller, Daniel H. Detroit
Miller, Elmer B. Detroit
Miller, Hazen L. Detroit
Miller, Karl. Detroit
Miller, M. M. Detroit
Miller, Maurice P. Trenton
Miller, Myron H. Detroit
Miller, T. H. Detroit
Miller, Wm. E. Detroit
Mills, Clinton C. Detroit
Mills, Georgia V. Detroit
Milton, Boynton A. Inkster
Mintz, Morris J. Detroit
Mintz, Edward I. Detroit
Miral, Solomon P. Detroit
Miro, Morey D. Detroit
Mischevich, Sophie. Detroit
Mitchell, C. Leslie. Detroit
Mitchell, Gertrude F. Detroit
Mitchell, Ralston S. Detroit
Mitchell, W. Bede. Detroit
Moehlig, Robert C. Detroit
Moisides, V. P. Detroit

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Moll, Clarence D.....Detroit
Molner, Joseph G.....Detroit
Molner, Stephen.....Detroit
Moloney, J. Clark.....Birmingham
Mond, Edward.....Detroit
Monfort, Willard.....(L) Highland Park
Montgomery, John C.....Detroit
Montante, Joseph R.....Detroit
Moore, James A.....Detroit
Morand, Louis J.....Detroit
Moriarty, George.....Detroit
Morin, John B.....Detroit
Moritz, H. C.....Detroit
Morley, Harold V.....Detroit
Morley, James A.....Detroit
Moroun, S. J.....Detroit
Morris, Harold L.....Detroit
Morris, Roger S.....Grosse Pointe
Morrison, Marjorie G. E.....Detroit
Morse, Plinn F.....Detroit
Morton, David G.....Detroit
Morton, J. B.....(L) Detroit
Mosee, W. Jones.....Detroit
Mosen, Max M.....Detroit
Moss, E. B.....Detroit
Moss, Nathan H.....Detroit
Moss, Selma S.....Detroit
Mott, Carlin P.....Detroit
Moulton, Charles.....Detroit
Muellenhagen, Walter J.....Detroit
Munson, F. T.....Detroit
Munson, Henry T.....Detroit
Muntyan, Andrew.....Detroit
Murphy, D. J.....Detroit
Murphy, Frank J.....Detroit
Murphy, John M.....Detroit
Murphy, Scipio G.....Detroit
Murphy, W. M.....Detroit
Murphy, Robert T.....Detroit
Murray, George M.....Detroit
Murray, William A.....Detroit
Muske, Paul H.....Detroit
Myers, Dan W.....Detroit
Myers, Gordon B.....Grosse Pointe
Nagel, Oscar.....Detroit
Nagle, John W.....Wyandotte
Nahigian, Russell.....Dearborn
Naud, Henry J.....Detroit
Nawotka, E. E.....Detroit
Naylor, A. E.....Detroit
Naylor, Arthur H.....Detroit
Neeb, Walter G.....Detroit
Nelson, Harry M.....Detroit
Nelson, Victor E.....Detroit
Nettleship, Anderson.....Detroit
Neumann, Arthur J.....Detroit
Newbarr, Arthur A.....Detroit
Newman, Max Karl.....Detroit
Nielsen, Aage E.....Detroit
Nichamin, Samuel J.....Detroit
Nickerson, Dean.....Highland Park
Nigro, Norman D.....Detroit
Nill, John B.....Detroit
Nill, Wm. F.....Detroit
Noble, Wm. C.....Ecorse
Noer, Rudolf J.....Grosse Pointe Farms
Nolan, Bernard E.....Detroit
Nolting, Wilfred S.....Detroit
Norconk, A. A.....Detroit
Norris, Edgar H.....Detroit
Northrop, Arthur K.....(E) Detroit
Northrop, Arthur, Jr.....Detroit
Norton, A. B.....Detroit
Norton, Charles S.....Detroit
Noth, Paul H.....Grosse Pointe Farms
Novy, R. L.....Detroit
Nowicki, Joseph A.....Detroit
O'Brien, E. J.....Detroit
O'Brien, G. M.....Detroit
O'Donnell, Charles.....Dearborn
O'Donnell, David H.....(E) Detroit
O'Donnell, Dayton H.....Detroit
Ohmart, Galen B.....Detroit
O'Hara, James T.....Detroit
Ohr, Harold F.....Detroit
Okun, Milton H.....Detroit
Olechowski, Leo W.....Bremerton, Wash.
Olen, Alex.....Detroit
O'Linn, Francis P.....Detroit
Olmsted, Wm. R.....Detroit
Oman, Cyrus F.....Detroit
Oppenheim, J. M.....Detroit
Orecklin, L.....Detroit
Organ, Fred W.....Detroit
Ormond, John K.....Detroit
Ornstein, Charles.....Detroit
O'Rourke, Paul V.....Detroit
O'Rourke, R. M.....Detroit
Osius, Eugene A.....Detroit
Ott, Harold A.....Detroit
Ottaway, John P.....Detroit
Owen, Clarence I.....Detroit
Owen, James A.....Detroit
Owens, Betty B.....Detroit
Palmer, Alice.....Detroit

Palmer, Hayden.....Detroit
Pangburn, L. E.....Detroit
Panic, Stephen M.....Detroit
Panzer, Edward J.....(E) Detroit
Parker, Benjamin R.....Detroit
Parker, Walter R.....(E) Detroit
Parkinson, Dorris.....Detroit
Parr, R. W.....Detroit
Parsons, John P.....Grosse Pointe Park
Pasternacki, Norbert T.....Detroit
Paterson, Walter G.....(L) Detroit
Pawlowski, Jerome.....Detroit
Payne, Eugene.....Detroit
Paysner, Harry A.....Detroit
Peabody, Charles W.....Detroit
Peacock, Lee W.....Highland Park
Pearman, Chas. L. R.....Detroit
Pearse, Harry A.....Detroit
Peggs, George F.....Detroit
Penberthy, Grover C.....Detroit
Pendy, John M.....Detroit
Pensler, Meyer.....Detroit
Pequegnot, Charles F.....(L) Detroit
Perdue, Grace M.....Detroit
Perkin, Frank S.....Detroit
Perkins, Ralph A.....Detroit
Perlis, H. L.....Detroit
Perry, Alvin, La Forge.....Detroit
Peterman, Earl A.....Detroit
Petix, Samuel C.....Detroit
Pevin, Pauline.....Detroit
Pfeffer, Isadore S.....Detroit
Pfeiffer, Rudolph L.....Detroit
Phetepace, W. S.....Detroit
Pichette, J. Walton.....Detroit
Pickard, Orlando W.....Detroit
Pidgeon, Susan.....Detroit
Pierce, Frank L.....Detroit
Pierson, Max J.....Detroit
Pietraszewski, A. W.....Detroit
Pilling, M. A.....Detroit
Pinckard, Karl G.....Dearborn
Pinney, Lyman J.....Detroit
Pino, Ralph H.....Detroit
Piper, Clark C.....Detroit
Piper, Ralph R.....Detroit
Pittman, J. E.....Detroit
Plaggemeyer, H. W.....Detroit
Pliskow, Harold.....Detroit
Podewza, John W.....Grosse Pointe Woods
Poirier, Ralph A.....Detroit
Pollack, John J.....Detroit
Pool, Walter D.....Detroit
Poos, Edgar.....Detroit
Poretta, Anthony C.....Detroit
Poretta, F. S.....Detroit
Porter, Howard J.....Romulus
Posner, Irving.....Detroit
Pratt, Jean P.....Detroit
Pratt, Lawrence.....Detroit
Prendergast, John J.....Detroit
Priborsky, Benjamin H.....Detroit
Price, A. H.....Detroit
Price, Alvin E.....Detroit
Proctor, Bruce.....Detroit
Proud, Robert H.....Flat Rock
Pugliesi, Benedetto.....Detroit
Purcell, Frank H.....Detroit
Putra, A. M.....Detroit
Quigley, William.....Detroit
Rabinovitch, Bella.....Detroit
Rahm, Lambert P.....Detroit
Raiford, Frank P.....Detroit
Raiford, Frank P., Jr.....Detroit
Rao, John O.....Detroit
Raskin, John.....Detroit
Raskin, Morris.....Detroit
Rastello, Peter B.....Detroit
Ratigan, C. S.....Dearborn
Raynor, Harold F.....Detroit
Reberdy, George J.....Detroit
Reder, Ben.....Detroit
Redfern, Wm. Earl.....Detroit
Reed, E. Hobart.....(A) Detroit
Reed, Everett H.....Detroit
Reed, H. Walter.....Detroit
Rees, Howard C.....Detroit
Reed, Ivor E.....Detroit
Reichling, R. J.....Detroit
Reid, J. Gilbert.....Detroit
Reid, Wesley G.....Detroit
Reiff, Morris V.....Detroit
Reinbolt, Charles A.....(L) Detroit
Reinsh, Ernest R.....Detroit
Reisman, Nathan J.....Detroit
Rekshaw, W. R.....Detroit
Renaud, G. L.....(E) Detroit
Rennell, Leo P.....Detroit
Renzi, Russell H.....Detroit
Reske, Alven.....Dearborn
Reveno, Wm. S.....Detroit
Rexford, W. K.....Detroit
Reye, H. A.....Detroit
Reynier, C. E.....Detroit
Reynolds, Lawrence.....Detroit

Reynolds, R. P.....Detroit
Rezanka, Harold J.....Grosse Pointe
Rhoades, F. P.....Detroit
Rice, Harold B.....Detroit
Rice, Meshel.....Oxford
Richardson, Allan L.....Detroit
Richardson, Robert F.....Wayne
Rick, Paul J.....Detroit
Ridge, Ralph W.....Wyandotte
Rieden, James A.....Detroit
Rieckhoff, George G.....Detroit
Rieg, John F.....Detroit
Rieger, John B.....Detroit
Rieger, Mary H.....Detroit
Riseborough, E. C.....Detroit
Rizzo, Frank.....Grosse Pointe Park
Rizzo, Paul.....Detroit
Robb, Ed. L.....Detroit
Robb, Herbert F.....Detroit
Robb, J. Milton.....Grosse Pointe Village
Roberts, Arthur J.....Ecorse
Robins, Samuel C.....Detroit
Robinson, Edwin L.....Detroit
Robinson, Fred L.....Dearborn
Robinson, George W.....Detroit
Robinson, Harold A.....Detroit
Robinson, Howard.....Detroit
Robinson, R. G.....Detroit
Rogers, Aaron Z.....Grosse Pointe Woods
Rogers, James D.....Wyandotte
Rogin, James R.....Detroit
Rogoff, A. S.....Detroit
Rohde, Paul C.....Detroit
Roland, Charles F.....Detroit
Rom, Jack.....Detroit
Roman, Stanley J.....Detroit
Roney, Eugene H.....Detroit
Rosbolt, Oscar P.....Detroit
Rose, Bernard.....Detroit
Rosefield, John L.....Detroit
Rosen, Harold M.....Detroit
Rosen, Robert.....Detroit
Roseman, J. D.....Detroit
Rosenthal, Louis H.....Detroit
Rosenthal, Samuel.....Detroit
Rosenzweig, Saul.....Detroit
Ross, Ben C.....Detroit
Ross, D. G.....Grosse Pointe
Ross, Hyman.....Dearborn
Rotarius, E. M.....Detroit
Roth, Edward T.....Detroit
Roth, Theodore I.....Detroit
Rothbart, H. B.....Detroit
Rothman, Emil D.....Detroit
Rothman, H. R.....Detroit
Rottenberg, Leon.....Detroit
Rowda, Michael S.....Detroit
Rowe, Robert.....Detroit
Rowell, Robert C.....Eloise
Rucker, Julian J.....Detroit
Rueger, Milton J.....Detroit
Rueger, Ralph C.....Detroit
Runge, Edward F.....Detroit
Rupp, Robert H.....Ferndale
Rupprecht, Emil F.....Detroit
Ruskin, I. W.....Detroit
Ruskin, Samuel H.....Detroit
Russell, John C.....Detroit
Rutzen, Arthur C.....Detroit
Ryan, Charles F.....Detroit
Ryan, W. D.....Detroit
Rydzewski, Joseph B.....Detroit
Ryerson, Frank L.....Detroit
Sack, A. G.....Detroit
Sa'Di, Lufti.....Detroit
Sadowski, Roman.....Detroit
Sage, Bernard A.....Dearborn
Sage, Edward O.....(L) Detroit
Sage, Thomas.....Detroit
Sager, E. L.....Detroit
St. Amour, Hector J.....Detroit
St. Louis, R. J.....River Rouge
Sakorraphos, Stelios N.....Detroit
Salchow, Paul T.....Detroit
Salowich, John N.....Allen Park
Saltzstein, Harry C.....Detroit
Sand, Harry H.....Detroit
Sander, I. W.....Detroit
Sanders, Alex W.....Detroit
Sanderson, Alvord R.....Grosse Pointe Park
Sanderson, Suzanne.....Detroit
Sandler, Nathaniel.....Detroit
Sands, G. E.....Detroit
Sandweiss, David J.....Detroit
Sanford, Hawley S.....Detroit
Sapala, M. Andrew.....Detroit
Sargent, William R.....Detroit
Saul, John J.....Detroit
Sauter, Simon H.....Detroit
Savignac, Eugene M.....Detroit
Scarney, Herman D.....Detroit
Schaefer, Robert L.....Detroit
Schaeffer, Martin.....Detroit
Schembeck, I. S.....Detroit
Schenden, A. J.....Melvindale

Schiller, A.....
Schilling, A.....
Schinagel, A.....
Schirack, A.....
Schkloven, A.....
Schlach, A.....
Schlafer, A.....
Schlemer, A.....
Schlesinger, A.....
Schmaltz, A.....
Schmidt, A.....
Schmidt, R.....
Schmier, A.....
Schmitt, A.....
Schneck, A.....
Schneider, A.....
Schneider, A.....
Schoenhel, A.....
Schoor, R.....
Schooten, A.....
Schreiber, A.....
Schroeder, A.....
Schug, R.....
Schulte, A.....
Schultz, A.....
Schultz, A.....
Schwartz, A.....
Schwartz, A.....
Schwartz, A.....
Schweige, A.....
Sciarrino, A.....
Scott, R.....
Scott, W.....
Screen, I.....
Scruton, A.....
Seabury, A.....
Secord, A.....
Seely, A.....
Seely, A.....
Segar, I.....
Seibert, A.....
Seiferle, A.....
Selby, C.....
Sellers, A.....
Sellers, A.....
Selling, A.....
Selman, A.....
Sewell, A.....
Shafarm, A.....
Shaffer, A.....
Shaffer, A.....
Shannon, A.....
Shapiro, A.....
Shapiro, A.....
Sharrer, A.....
Shaw, I.....
Shaw, I.....
Shawar, A.....
Sheldon, A.....
Shelton, A.....
Sheppa, A.....
Sherma, A.....
Sherma, A.....
Sherrin, A.....
Sherwo, A.....
Shewcl, A.....
Shields, A.....
Shifrin, A.....
Shiovit, A.....
Shippe, A.....
Shipto, A.....
Shlain, A.....
Shoenf, A.....
Shore, A.....
Shotw, A.....
Shulak, A.....
Shum, A.....
Shurly, A.....
Siddal, A.....
Sieber, A.....
Siefert, A.....
Siefert, A.....
Siegel, A.....
Sill, A.....
Silver, A.....
Silver, A.....
Simor, A.....
Simp, A.....
Simn, A.....
Sincl, A.....
Singe, A.....
Sippo, A.....
Sisson, A.....
Siwk, A.....
Skim, A.....
Skzy, A.....
Skull, A.....
Slado, A.....
Slate, A.....

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Schiller, A. E. Detroit
Schilling, Harold K. Dearborn
Schinagel, Geza. Detroit
Schirack, Ray. Detroit
Schkloven, Norman. Detroit
Schlacht, George F. Romulus
Schlafer, Nathan H. Detroit
Schleser, John H. Detroit
Schlesinger, Henry. Detroit
Schmaltz, John D. Detroit
Schmidt, Harry E. Dearborn
Schmidt, Milton R. Trenton
Schmier, Burton L. Detroit
Schmitt, Norman L. Detroit
Schneck, Robert J. Detroit
Schneider, Alex N. Detroit
Schneider, Curt P. Detroit
Schoenfeld, Gilbert D. Detroit
Schoor, Robert L. (E) Detroit
Schooten, Sarah S. Detroit
Schreiber, Frederic. Detroit
Schroeder, Carlisle F. Detroit
Schug, Richard H. Highland Park
Schulte, Carl H. Detroit
Schultz, Ernest C. Detroit
Schultz, Robert F. Detroit
Schwartz, Ben. Detroit
Schwartz, Louis A. Detroit
Schwartz, Oscar D. Detroit
Schwartzberg, Joseph A. Detroit
Schweigert, C. F. Detroit
Sciarrino, Stanley V. Detroit
Scott, R. J. Detroit
Scott, William J. Grosse Pointe Farms
Screen, Raymond J. Wyandotte
Scruton, Foster D. Detroit
Seabury, Frank P. Detroit
Secord, Eugene W. Detroit
Seeley, James B. Dearborn
Seeley, Ward F. Detroit
Segar, Lawrence F. Detroit
Seibert, Alvin H. Grosse Pointe Park
Seiferlein, Archie L. Detroit
Selby, C. D. Detroit
Sellers, Charles W. Detroit
Sellers, Graham. Detroit
Selling, Lowell. Detroit
Selman, J. H. Detroit
Sewell, George S. Detroit
Shafarman, Eugene. Detroit
Shaffer, Joseph H. Detroit
Shaffer, Loren W. Detroit
Shafter, Royce R. Detroit
Shannon, Wm. F. Detroit
Shapiro, I. Allen. Detroit
Shapiro, Jacob. Detroit
Shapiro, Oscar U. Detroit
Sharrer, Charles H. Detroit
Shaw, Norman D. Dearborn
Shaw, Robert G. (L) Detroit
Shawan, H. K. Detroit
Sheldon, John A. Detroit
Shelton, C. F. Detroit
Sheppard, Emma L. W. Center Line
Sherman, Boudana B. Detroit
Sherman, Louis L. East Detroit
Sherman, Wm. L. Detroit
Sherrin, Edgar R. Detroit
Sherwood, De Witt L. Detroit
Shewchuk, Alexander P. Detroit
Shields, W. L. Detroit
Shifrin, Peter G. Detroit
Shiovitz, Louis. Detroit
Shippen, M. R. Eloise
Shipton, W. Harvey. Detroit
Shlain, Benjamin. Detroit
Shoenfeld, Adolph. Detroit
Shore, O. J. Detroit
Shotwell, Carlos W. Detroit
Shulak, Irving B. Detroit
Shumaker, Edw. J. Detroit
Shurly, Burt R. (E) Detroit
Siddall, Roger S. Detroit
Sieber, Edward H. Dearborn
Siefert, John L. Detroit
Siefert, Wm. A. Detroit
Siegel, Henry. Detroit
Sill, Jack A. Detroit
Silverman, I. Z. Detroit
Silver, Israel W. Detroit
Silverman, M. M. Detroit
Simon, Emil R. Detroit
Simon, Heinz. Detroit
Simpson, C. E. Detroit
Simpson, H. Lee. Detroit
Sinclair, James W. Detroit
Singer, Floyd W. Detroit
Sippola, George W. Detroit
Sisson, John M. Detroit
Siwka, Isidore J. Detroit
Skinner, W. Clare. Detroit
Skrzycki, Stephen S. Detroit
Skully, E. J. Detroit
Sladen, Frank J. Grosse Pointe
Slate, Raymond N. Detroit

Slaughter, Fred M. Detroit
Slaugenhaupt, J. G. Detroit
Slazinski, Leo W. Detroit
Slipson, Edith. Detroit
Slevin, John G. Detroit
Sliwin, Edward P. Detroit
Small, Henry. Detroit
Smeck, Arthur R. Detroit
Smith, Charles E. Detroit
Smith, Clarence V. Detroit
Smith, Claude A. River Rouge
Smith, F. Janney. Detroit
Smith, Gerrit C. Detroit
Smith, Henry L. Detroit
Smith, J. Allen. Detroit
Smith, James A. Detroit
Smyka, Edward J. Detroit
Smyth, Charley J. Eloise
Snedeker, Bernard C. Highland Park
Snow, L. W. Northville
Snyder, Arthur M. Detroit
Sokolov, Raymond A. Detroit
Somers, Donald C. Detroit
Sonda, Lewis P. Detroit
Sorock, Milton L. Detroit
Spademan, Loren C. Detroit
Spalding, Edward D. Detroit
Sparling, Harold I. Northville
Sparling, Irene L. Northville
Speck, Carlos C. Allen Park
Spector, Maurice J. Detroit
Spero, Gerald D. Detroit
Sperry, Frederick L. Detroit
Spiro, Adolph. Detroit
Springborn, B. R. Detroit
Sprunk, Carl. Detroit
Sprunk, John P. Detroit
Spurrer, Ethelbert. Detroit
Squires, W. H. Eloise
Stafford, Frank W. J. Detroit
Stalker, Hugh. Grosse Pointe
Stamell, Meyer. Detroit
Staniszowski, Casimir. Detroit
Stanton, James M. Detroit
Stanton, Myron. Detroit
Stapleton, Wm. J., Jr. (L) Detroit
Starrs, Thomas C. Detroit
Staub, Howard P. Detroit
Stearns, Alex B. Grosse Pointe Woods
Steele, Hugh. Detroit
Stefani, E. L. Detroit
Stefani, Raymond T. Detroit
Stein, Edward. Detroit
Stein, Albert H. Detroit
Stein, Emory. Detroit
Stein, Saul C. Van Dyke
Steinbach, Henry B. Detroit
Steinberger, Eugene. Detroit
Steiner, Gabriel. Detroit
Steiner, Louis J. Detroit
Steinhardt, Milton J. Detroit
Stellhorn, Chester E. Detroit
Stellhorn, Mary Christine. Detroit
Sterba, Richard. Detroit
Sterling, Lawrence S. Detroit
Sterling, Robert R. Detroit
Stern, Harry L. Detroit
Stern, Leonard H. Detroit
Stern, Louis D. Detroit
Stewart, Harry L. Detroit
Stewart, Thomas O. Detroit
Stiefel, Daniel M. Detroit
Stirling, Alex M. Detroit
Stith, Dwight E. Detroit
Stobbe, Godfrey D. Detroit
Stock, Harry. Detroit
Stockwell, B. W. Detroit
Stokfisz, T. Detroit
Stout, Lindley H. Detroit
Straith, Claire L. Detroit
Strand, Martin E. Dearborn
Stricker, Henry D. Detroit
Strickroot, Fred L. Detroit
Strohschein, Don F. Detroit
Stryker, Walter. Detroit
Stubbs, C. T. Detroit
Stubbs, Harold W. Detroit
Stuecheli, Milton B. Detroit
Sugar, David I. Detroit
Sugar, H. Saul. Detroit
Sugarman, Marcus H. Detroit
Sullivan, Hugh A. Detroit
Summers, Wm. A. Detroit
Summers, Wm. S. Detroit
Surbis, John P. Detroit
Sutherland, J. M. Detroit
Suwinski, Raymond H. Detroit
Swanson, Carl W. Detroit
Swanson, Cleary N. Detroit
Swanson, Robert G. Detroit
Sweeny, Donald, Jr. Detroit
Swift, Karl L. Detroit
Switzer, Bertrand C. Detroit
Sylvan, Melvin M. Van Dyke
Syphax, Charles S., Jr. Detroit

Szappanyos, Bela T. Detroit
Szedja, J. C. Detroit
Szilagyi, Emerick D. Detroit
Szlachetka, Vincent E. Detroit
Szladek, Frank J. Wyandotte
Szmigiel, A. J. Detroit
Tamblyn, E. J. Detroit
Tann, H. E. Detroit
Tann, Julius C. Detroit
Tapert, Helen. Detroit
Tassie, Ralph N. Detroit
Tatellis, Gabriel. Detroit
Taylor, Aaron. Detroit
Taylor, Ivan B. Detroit
Taylor, Nelson M. Grosse Pointe
Taylor, Reu Spencer. (L) Detroit
Tear, Malcolm J. Detroit
Teitelbaum, Myer. Detroit
Tenaglia, Thomas A. Ecorse
Tenerowicz, Rudolph G. Detroit
Test, Frederick C., II. Detroit
Texter, Elmer C. Detroit
Thaler, Wm. J. Detroit
Thompson, Alderman. Detroit
Thompson, Arthur Lee. Detroit
Thompson, H. E. Detroit
Thompson, H. O. Detroit
Thompson, W. A. Detroit
Thomson, Alexander. (E) Detroit
Thornell, Harold E. Detroit
Thosteson, George C. Detroit
Tichenor, E. D. Detroit
Toepel, Otto T. (E) Detroit
Tolle, Charles E. Detroit
Tomsu, Charles L. Detroit
Top, Franklin H. Detroit
Townsend, Frank M. Detroit
Trask, Harry D. Detroit
Tregenza, W. Kenneth. Detroit
Troester, George A. Detroit
Trombino, James F. Detroit
Trombley, Bryan. Detroit
Trombley, Joseph J., Jr. Detroit
Troxell, Emmett C. Detroit
Truskowski, E. G. Hamtramck
Tryhall, S. W. Detroit
Tulloch, John. Detroit
Tupper, Roy D. Detroit
Turbett, Claude W. Detroit
Turcotte, Vincent J. Detroit
Turkel, Henry. Detroit
Turnbull, Jack V. Dearborn
Tuttle, Wm. M. Detroit
Tyson, Wm. E. E. (L) Detroit
Ujda, Chester J. Wayne
Ulbrich, Henry L. Detroit
Ulrich, Willis H. Detroit
Umphrey, Clarence E. Detroit
Usher, Wm. Kay. Detroit
Vale, C. Fremont. Detroit
Van Baalen, M. R. Detroit
Van Gundy, Clyde R. Detroit
Van Heldorf, Harry. Detroit
Van Nest, A. E. Detroit
Van Rhee, George. Detroit
Van Riper, Steven L. Detroit
Vardon, Edward M. Detroit
Vasu, V. O. Detroit
Vergosen, Harry E. Detroit
Vogelin, Adolph E. Detroit
Vogel, Hymen A. Detroit
Vokes, Milton D. Detroit
Von Der Heide, E. C. Detroit
Vossler, A. E. Detroit
Vreeland, C. Emerson. Detroit
Waddington, Joseph E. G. (E) Detroit
Waggoner, C. Stanley. Detroit
Waggoner, Lyle G. Detroit
Wanger, M. J. Detroit
Wainstock, Michael. Detroit
Wakeman, E. M. Dearborn
Waldott, George L. Detroit
Walker, Enos G. Detroit
Walker, Leo Whitney. Detroit
Walker, Roger V. Detroit
Wallace, S. Willard. Detroit
Walls, Arch. Detroit
Walser, Howard C. Detroit
Walsh, Charles R. Detroit
Walsh, Francis P. Detroit
Walters, Albert G. Detroit
Waltz, Frank D. B. Detroit
Waltz, Paul J. Detroit
Ward, George F. Detroit
Warden, Horace F. W. Detroit
Warner, Harold W. San Diego, Cal.
Warner, P. L. Detroit
Warner, Wm. J. Detroit
Warren, Irving A. Detroit
Warren, Wardsworth. Detroit
Wasserman, Lewis C. Detroit
Waszak, Charles J. Detroit
Watson, Douglas J. Detroit
Watson, Harwood G. Dearborn

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Watson, J. Edwin.....Detroit
 Watson, Robert W.....Highland Park
 Watts, Frederick B.....Detroit
 Watts, John J.....Detroit
 Wayne, M. A.....Detroit
 Weaver, Clarence E.....Detroit
 Weaver, Delmar F.....Grosse Pointe
 Weber, Karl W.....Detroit
 Webster, John E.....Detroit
 Weed, Milton R.....Detroit
 Wehenkel, Albert M.....Detroit
 Weiner, M. B.....Detroit
 Weingarden, David H.....Detroit
 Weinstein, Jacob.....Detroit
 Weisberg, A. Allen.....Detroit
 Weisberg, Harry.....Detroit
 Weisberg, Jacob.....Detroit
 Weisenthal, Irvin.....Detroit
 Weiser, Frank A.....Detroit
 Weiss, C. P.....Detroit
 Weiss, J. G.....Detroit
 Welch, John H.....Detroit
 Weller, Charles N.....Detroit
 Wells, Martha.....Detroit
 Weltman, Carl G.....Detroit
 Wendel, Jacob S.....Detroit
 Wenzel, Jacob F.....Detroit
 West, Howard G.....Detroit
 Weston, Bernard.....Detroit
 Weston, Earl E.....Detroit
 Weston, Horace L.....Detroit
 Westover, Charles.....Plymouth
 Weyher, Russell F.....Detroit
 Whalen, Neil J.....Detroit
 Wharton, Thomas V.....Wyandotte
 Whinnery, Randall A.....Detroit
 White, Milo R.....Detroit
 White, Milton W.....Detroit

White, Prosper D., Jr.....Detroit
 White, Theodore M.....Detroit
 Whitehead, L. S.....Detroit
 Whitehead, Walter K.....Detroit
 Whiteley, Robert K.....Detroit
 Whitney, Elmer L.....Detroit
 Whitney, Rex E.....Detroit
 Whittaker, Alfred H.....Detroit
 Wiant, John L.....Detroit
 Wiant, R. E.....Detroit
 Wickham, A. B.....(L) Detroit
 Wiechowski, Henry E.....Detroit
 Wiener, I.....Detroit
 Wietersen, Fred K.....Birmingham
 Wight, Fred B.....Detroit
 Wilcox, Leslie F.....Detroit
 Wilkinson, Arthur P.....Detroit
 Williams, C. J.....Detroit
 Williamson, John G.....Dearborn
 Wills, J. N.....Detroit
 Wilner, Irvin.....Detroit
 Wilson, Gerald A.....Detroit
 Wilson, M. C.....Detroit
 Wilson, Stuart C.....Detroit
 Wilson, Walter J.....(L) Detroit
 Wiren, Lennart W.....Detroit
 Wishropp, Edward A.....Grosse Pointe
 Wisner, Harold E.....Detroit
 Wissman, H. C.....Dearborn
 Wittenberg, Arthur A.....Detroit
 Wittenberg, Samson S.....Detroit
 Wittenburg, Sydney S.....Detroit
 Witter, Frank C.....Detroit
 Witter, Joseph A.....Detroit
 Witus, Carl.....Detroit
 Witus, Morris.....Detroit
 Witwer, Eldwin R.....Detroit
 Wolfe, Max O.....Detroit

Wollank, Helen Wilson.....Detroit
 Wollenberg, Robert A. C.....Detroit
 Wood, George P.....Detroit
 Wood, Kenneth A.....Detroit
 Wood, Wilford C.....Detroit
 Woodburne, H. L.....Detroit
 Woodry, Norman L.....Detroit
 Woods, H. B.....Brown City
 Woods, W. Edward.....Detroit
 Woodworth, Wm. P.....Detroit
 Worzniak, Joseph J.....Wyandotte
 Wreggit, W. R.....Detroit
 Wright, Charles.....Detroit
 Wruble, Joseph.....Detroit
 Wygant, Thelma.....Dearborn
 Wyte, Wm. C.....Detroit
 Yesayan, H. G.....Detroit
 Yott, William J.....Detroit
 Young, Donald A.....Detroit
 Young, Donald C.....Detroit
 Young, Lloyd B.....Detroit
 Young, Viola M.....Detroit
 Youngman, D. C.....Detroit
 Zabinski, Edward J.....Detroit
 Zbudowski, A. S.....Hamtramck
 Zbudowski, Myron R.....Hamtramck
 Zemens, Joseph L.....Grosse Pointe Woods
 Zerbi, Victor.....Lincoln Park
 Zielinski, Charles J.....Detroit
 Zimmerman, R. L.....Detroit
 Zinn, George H.....Detroit
 Zinterhofer, John.....Detroit
 Zinterhofer, Louis.....Detroit
 Zlatkin, Louis.....Detroit
 Zonnis, Marian.....Detroit
 Zukerman, Morris.....Detroit
 Zukowski, Sigmund A.....Detroit

Wexford County

Albi, R. Wm.....Gary, Ind.
 Daugherty, R.....Cadillac
 Holm, Augustus.....Leroy
 Holm, Benton.....Cadillac
 Landy, George R.....Cadillac
 Lommen, Ralph.....Manton

McManus, Edwin.....Mesick
 Masselink, H. J.....McBain
 Merritt, C. E.....Manton
 Moore, G. P.....Cadillac
 Moore, Sair C.....Cadillac
 Murphy, Michael R.....Cadillac

Purdy, Calvin S.....Buckley
 Seltzer, Sol Norris.....Cadillac
 Showalter, Lawrence E.....Cadillac
 Smith, Fred R.....Lake City
 Smith, Wallace J.....Cadillac
 Spinks, R. E.....Cadillac

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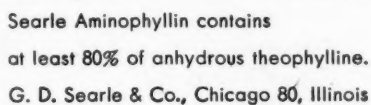
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Michigan's Department of Health

WM. DE KLEINE, M.D., Commissioner, Lansing, Michigan

STUDY MICHIGAN SALMONELLA

To conduct a study of the incidence of Salmonella infections in farm, pet and wild animals and the possible relationship to infection in humans, A. H. Wolff, D.V.M., has been assigned to the Bureau of Disease Control, Michigan Department of Health, by the United States Public Health Service. The Bureau of Laboratories is co-operating with him in the study.

The project is one of several recently inaugurated by the Veterinary Public Health Section of the United States Public Health Service directed toward the prevention of animal diseases transmissible to humans.

Approximately 200 types or varieties of Salmonella are known to date. Very few of these occur exclusively in man. The vast majority of the organisms primarily infect animals and birds. Aside from their veterinary significance, these animal infections are important in human medicine when they are transferred by meat, milk, and eggs, and perhaps by direct contact, to man.

Before the diseases can be adequately controlled, more data on the incidence in man and animal as well as the mode of transmission between man and animal must be obtained. The current investigation involves the incidence of Salmonella in dogs and possible relationship to infections in humans. The study will eventually include the incidence of the infections in other animals and in the various foods derived from animals.

Infants and the very old are more susceptible to infection by this germ than are people of other ages. The Salmonella organism is sometimes responsible for outbreaks of infantile diarrhea. Generally speaking, the symptoms of the illness vary from a gastro-enteritis to a severe blood infection with septic complications.

Thorough cooking or pasturization of animal or poultry food products (meat, milk and egg products), and adequate refrigeration provide the greatest measure of protection against infection with Salmonella organisms.

NO POLIO CROSS INFECTION IN HOSPITALS

No case of a cross infection from a poliomyelitis patient in a Michigan hospital has been reported since the decision of the Michigan Hospital Superintendents to admit polio patients to general hospitals a year ago.

DISEASE REGULATIONS PRINTED

The 1947 issue of the Michigan Regulations for the Control of Communicable Diseases has been sent by the Michigan Department of Health to all practicing physicians of the state. Anyone not receiving a copy may obtain it directly by writing to the Department.

ACCIDENTS FOURTH IN DEATH CAUSES

Accidents took the lives of one out of every 15 persons who died in Michigan in 1946. They constituted

the fourth cause of death. Home accidents took 1,385 lives, and motor accidents, 1,451 lives, of which 503 were pedestrians. Total deaths attributable to accidents in the state last year were 3,778.

BAD FOR CHILDREN

While preventive and curative medicine, since 1924, have tripled the chance of a Michigan child to live until he is fourteen years of age, the chance that he will die by accident has doubled since that time. Accidents caused every third death among Michigan children last year.

MEN AND BOYS DROWN

Nine out of every ten persons who drown in Michigan are men and boys. Only twenty-five women and girls were among the 265 persons who drowned in Michigan in 1946. Twelve of these were girls under ten years of age. Two-thirds of drownings in Michigan occur during the summer months.

RABIES CONTINUES TO INCREASE

The incidence of rabies in fourteen southern Michigan counties continues to increase. A total of 166 cases of rabies were reported in the first five months of this year, and six counties had established dog quarantine.

PREPARE FOR SCHOOL

The Department through newspapers and radio has advised parents of children who will enter school for the first time this fall to take the children to family physicians in June for complete physical checkup and for booster doses of immunizing agents.

INCIDENCE OF COMMUNICABLE DISEASE

Disease	May 1947	May 1946	7-year median
Diphtheria	17	25	14
Gonorrhea	938	1085	870
Lobar Pneumonia	61	93	153
Measles	623	5134	3930
Meningococcic meningitis	11	21	19
Pertussis	1030	607	915
Poliomyelitis	2	1	0
Scarlet fever	503	755	1062
Syphilis	1379	1478	1345
Tuberculosis	452	450	511
Typhoid fever	5	4	4
Undulant fever	28	15	11
Smallpox	0	0	1

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What's What

Jay C. Ketchum, Executive Vice President of Michigan Medical Service, spoke on "Voluntary Insurance Plan" at the hearings on S.545 in Washington, May 23.

* * *

Toll of War—The total war cost to the United States is estimated at \$330,000,000,000 or \$2,233.94 per capita. To Canada: \$20,255,865,966, or \$1,688 per capita.

* * *

F. W. Hartman, M.D. and P. C. Martineau, M.D., Detroit, are authors of an original article, "Extensive Cutaneous Burns," which appeared in JAMA of May 31.

* * *

H. M. Miller, M.D., Detroit, is the author of an article, "General Practice in a Large Hospital," which was published in JAMA of May 3. It is a report of eight years' experience in the operation of such a Section.

* * *

Joseph H. Andries, M.D., and Hugh Harrison, M.D., Detroit, were honored at a banquet sponsored by the St. Joseph's Mercy Hospital Staff commemorating fifty years in practice of these two physicians. Engraved gold watches were presented to the two doctors from the hospital staff.

Wayne University College of Medicine has added the following course to its Postgraduate Continuation Curriculum for the summer quarter:

Allergy Clinic and Conference
Receiving Hospital

Tuesday—8:00 to 11:00 a.m.

Clinic 8-10

Conference 10-11

Fee—\$25.00

The course begins July 1 and runs for three months.

H. Marvin Pollard, M.D., Malcolm Block, M.D., and Wm. H. Bachrach, M.D., of Ann Arbor, Michigan, are authors of an original article, "Ulcerative Colitis," which appeared in JAMA of May 24.

* * *

The Third Pan-American Congress of Ophthalmology will be held in Havana, Cuba, January 4-10, 1948. A cordial invitation to all members of the Michigan State (Continued on Page 862)

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One-week course in Surgery of Colon & Rectum, starting September 15, and November 3.

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MEDICINE—Two-week intensive course, starting October 6.

Two-week course in gastro-enterology, starting October 20.

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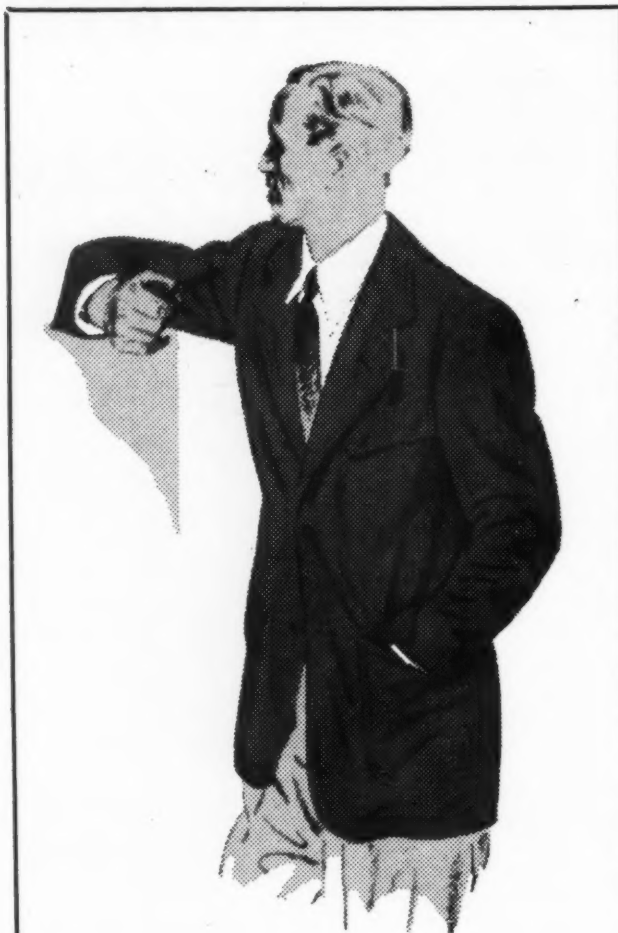
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(Continued from Page 860)

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Medical Society to attend the Congress has been extended by Tomas R. Yanes, M.D., P.O. Box 970, Havana, Cuba, President of the Congress.

* * *

Veterans Administration estimates that the number of living veterans and members of their families will reach a peak of 43 per cent of the nation's population within the next 5 years and decline in percentage thereafter.

* * *

C. P. McCord, M.D., Detroit, received the William S. Knudsen Award for the most outstanding contribution to Industrial Medicine for 1946-47. Congratulations, Dr. McCord!

* * *

Ralph A. Johnson, M.D., Detroit, has been appointed to the Detroit Public Welfare Commission by Mayor Edward J. Jefferies, for the term ending March 1, 1951. Congratulations, Commissioner Johnson!

* * *

William R. Bond, M.D., well known to many Michigan physicians, has been appointed Medical Director of VanPelt and Brown, Inc., Richmond, Va. Dr. Bond is Consultant for the Endocrine Clinic of the Medical College of Virginia.

* * *

W. Leonard Howard, M.D., was appointed Medical Superintendent of Wm. H. Mayberry Sanitarium in May, according to an announcement made by Bruce H. Douglas, M.D., Commissioner of Health of the City of Detroit. Congratulations, Dr. Howard!

* * *

The Congress on Industrial Health proposed for Detroit in October, 1947, has been cancelled, due to conflict with other national health meetings, according to Carl M. Peterson, M.D., Secretary of the AMA Council on Industrial Health.

* * *

Ralph Lee Fisher, A.B., M.D., F.A.C.P., and Morris Zukerman, A.B., M.D., of Detroit, published a paper on "Banti's Syndrome following Prolonged Infectious Hepatitis," with report of two cases in *The American Journal of Digestive Diseases* for November, 1946.

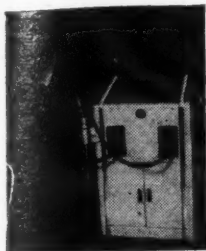
* * *

The annual meeting of Michigan Medical Service is to be held in the Ballroom of the Pantlind Hotel, Grand Rapids, on Monday, September 22, 2:00 p.m. The MMS membership comprises the members of the MSMS House of Delegates plus the members of the Board of Directors of Michigan Medical Service.

* * *

The Press Relations Committee for the 82nd Annual Session of the Michigan State Medical Society scheduled for Grand Rapids, September 23-26, appointed by B. R. Corbus, M.D., chairman of the Arrangements Committee, is as follows: C. A. Payne, M.D., chairman; G. T. Aitken, M.D. and J. R. Brink, M.D., all of Grand Rapids.

(Continued on Page 864)



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(Continued from Page 862)

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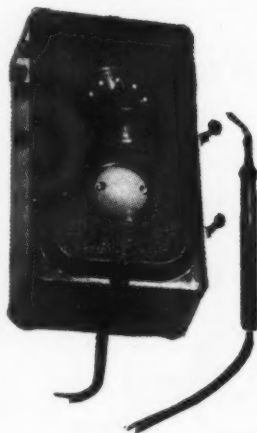
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* * *

Indiana recently passed a law requiring annual registration of physicians, effective July 1, 1947. Any Michigan practitioners of medicine who have Indiana licenses should write the Indiana State Board of Medical Registration and Examination, 416 K. of P. Bldg., Indianapolis 4, Indiana, for a copy of the "application for annual registration of license to practice the healing art in the State of Indiana." The nonresident fee is \$10.

* * *

Amendments to MSMS Constitution and By-Laws. A special MSMS Committee has been appointed to study the MSMS Constitution and By-Laws with a view to presenting recommendations for any necessary amendments to the House of Delegates in Grand Rapids next September. Chairman T. K. Gruber, Wayne County General Hospital, Eloise, Mich., would appreciate receiving any suggestions for proposed amendments to the MSMS Constitution or By-Laws.

* * *

Availability of doctors.—It is seriously recommended that arrangements be made in all localities so that one or more doctors of medicine are available on the "day off" usually taken by the medical profession in the community. This is to protect the medical profession from the criticism—frequently printed in newspapers—that "no doctors were available when the accident occurred, although 18 were called, etc., etc." Definite notification to the newspapers of arrangements made by county medical societies or communities along this line should be made.

* * *

Wayne University Alumni Association will hold "open house" in Parlor D, Mezzanine Floor, Pantlind Hotel, Grand Rapids, during the 1947 Annual Session of the Michigan State Medical Society, from Tuesday noon to Friday noon, September 23-26.

An exhibit of college yearbooks and alumni materials will be displayed. The headquarters will be manned by Homer D. Strong, M.D., Head of the Alumni Affairs of Wayne University.

All alumni of Wayne University College of Medicine are cordially invited to visit the headquarters in The Pantlind during the MSMS convention.

* * *

The Michigan State Medical Society has appointed a Special Committee of The Council to study the Medical Practice Act of Michigan. The personnel of the committee, which plans to report to the MSMS House of Delegates in September, 1947, is composed of: Harold L. Morris, M.D., Detroit; F. J. O'Donnell, M.D., Alpena; C. W. Colwell, M.D., Flint, L. A. Drolett, M.D., Lans-

(Continued on Page 866)

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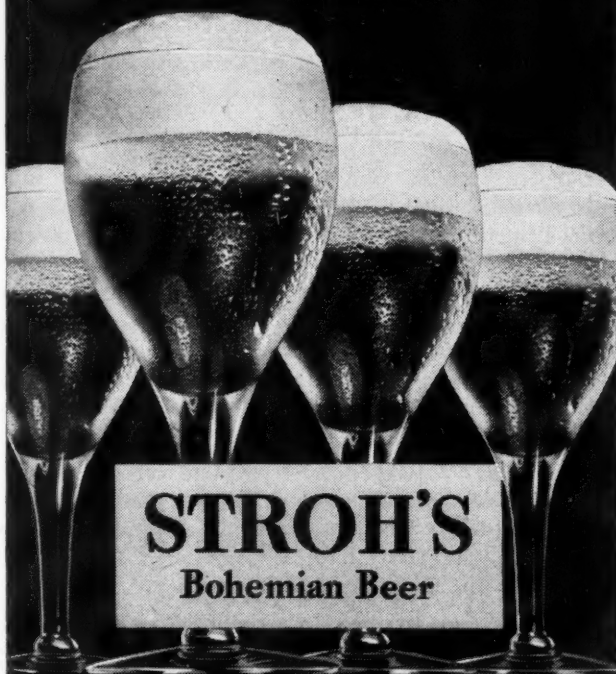
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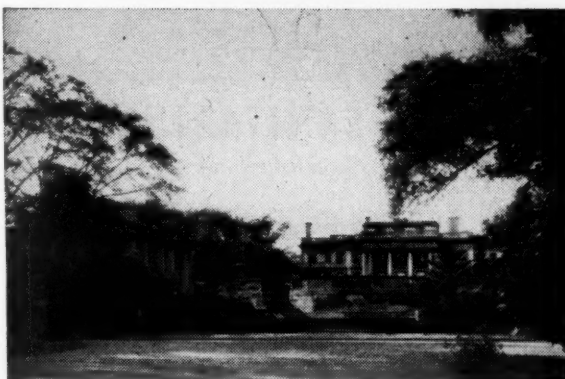
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(Continued from Page 864)

ing, L. F. Foster, M.D., Bay City, Wilfrid Haughey, M.D., Battle Creek, W. R. Torgerson, M.D., Grand Rapids, and J. Joseph Herbert, LL.B., Manistique, Advisor.

* * *

The International College of Surgeons (United States Chapter) will hold its 12th Assembly at the Palmer House, Chicago, September 28-October 4, 1947. Among fifty-two internationally famous surgeons who will present scientific papers are: Hamilton Bailey, London, England; Zachary Cope, London, England; Professor Raymond Darget, Bordeaux, France; Leon Gillis, Roehampton, England; Basil Hughes, London, England; Ambassador Oscar Ivanissevich, Buenos Aires, Argentina; William Oliver Lodge, Halifax, England; Professor Felix Mandl, Jerusalem, Palestine; J. Almeida Rios, Rio de Janeiro, Brazil; August Maria Sisson, Porto Alegre, Brazil; and Alex W. Spain, Dublin, Ireland.

* * *

What is the difference between Membership and Fellowship in the American Medical Association? AMA membership comes automatically to any member certified by a county medical society to the state medical society, which in turn certifies his name to the AMA; Fellowship is a privilege conferred by the AMA Judicial Council on those members who apply for Fellowship on the prescribed form and subscribe to the AMA Journal, paying the annual Fellowship dues for the current year. Attendance at the Scientific Assembly and all other privileges of the AMA are granted to Fellows.

The work of the AMA is outlined in a concise booklet entitled "The Individual Physician" which may be procured free by writing the AMA, 535 No. Dearborn St., Chicago 10, Ill.

* * *

The following bills were passed by the Michigan Legislature of 1947:

H.B. 451.—This Act will implement in Michigan the provisions of the Federal Hospital Survey and Construction Act. As passed, the law is almost verbatim with the recommendations made by the MSMS Executive Committee of The Council. It calls for a Director to be appointed by the Governor to administer the act with the help of an Advisory Council. No crippling amendments were included in the bill as finally passed in spite of sundry attempts of a cultist organization to use it as an opening wedge for entrance into medical hospitals. The Act specifically provides against any attempt to use the provisions of the law to socialize medicine. Much of the credit for passage of this Act is due Mr. Howard Estes of Birmingham, the introducer of the bill.

S.B. 274, 275.—As passed these Acts will raise hospital rates under the Afflicted and Crippled Children's Acts from \$7 to \$11 and the maximum surgical fee in the Michigan Crippled Children Commission fee schedule from \$75 to \$90 (a 20 per cent increase).

S.B. 201.—As passed this law will license and regulate Vivisection. No crippling amendments were made to the

(Continued on Page 868)

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WHAT'S WHAT

(Continued from Page 866)

bill as originally drafted, despite bitter activity by antivivisectionists aided by the vigorous promotions of a chain newspaper.

S.B. 378.—This Act will require immunization against diphtheria, whooping cough and smallpox as a condition precedent to entrance in school. (Vetoed by the Governor.)

* * *

Marriages Increased.—Cupid, Justices of the Peace, and Ministers came into their own again in Michigan cities in 1946, it is indicated by figures released this week by the Bureau of Records and Statistics of the Michigan Department of Health.

The 1946 marriage license figures of Flint and Grand Rapids exceeded their 1945 figures by greater percentages than were recorded in any other major city in the United States. Detroit was not far behind.

Flint leads the cities of over 100,000 population in the nation with a 73.3 per cent increase. Grand Rapids was second in the nation with 72.5 per cent increase. Detroit's increase was 53.9 per cent.

Return of soldiers from the European and Pacific theaters is believed to have boosted the number of licenses issued. All three of the Michigan towns which are included in the cities over 100,000 population showed decrease in marriage licenses issued from 1941 to 1944, with Grand Rapids showing the greatest decline.

The second annual postgraduate course in Diseases of the Chest, sponsored by the American College of Chest Physicians, will be held September 15-20, 1947, at the Municipal Tuberculosis Sanitarium, Chicago, Illinois. Tuition \$50.00. For information, write American College of Chest Physicians, 500 N. Dearborn Street, Chicago 10, Illinois.

* * *

L. M. Snyder, M.D., has joined the law firm of Foster, Cummins, Snyder, Cameron and Foster, 705 American State Bank Bldg., Lansing, and is devoting his full time to the practice of legal medicine.

* * *

Wolff W. Zuelzer, M.D., Detroit, is the author of an original article "Pathogenesis of Anemia" which appears in JAMA of July 19.

* * *

The Chicago Ophthalmological Society will give a 40-hour refresher course, December 8 to 13, inclusive. The faculty will include members of the Eye Department of The University of Chicago, The University of Illinois, Loyola University, Northwestern University and staff members of all of the principal hospitals of Chicago. Instruction will consist of didactic and practical courses, emphasis being placed on the practical courses given to small groups. Physicians practicing ophthalmology and eye, ear, nose and throat are eligible for the course. The fee will be \$100.00. For details write to the registrar, Miss Maude Fairbairn, 8 W. Oak Street, Chicago, Illinois.

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Acknowledgment of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

EXPERIENCES WITH FOLIC ACID. By Tom D. Spies, M.D., Associate Professor of Medicine, University of Cincinnati School of Medicine; Director of the Nutrition Clinic, Hillman Hospital, Birmingham, Alabama. Chicago: The Yearbook Publishers, Inc., 1947. Price \$3.75.

Folic acid used in the treatment of macrocytic anemia is one of the great advances of the age of great progress in medicine. The rapidity of this advance is unparalleled. This book outlines the methods of research, selection of cases and their response to folic acid. Pernicious anemia is now well under control. The internist and the general practitioner who treat these patients need this book. It is a stimulating brochure.

REHABILITATION THROUGH BETTER NUTRITION. University of Cincinnati Studies in Nutrition at the Hillman Hospital, Birmingham, Alabama. By Tom D. Spies, M.D., from the Department of Internal Medicine, University of Cincinnati College of Medicine. 94 pps. 50 illus. Philadelphia and London: W. B. Saunders Company, 1947. Price \$4.00.

This is a book on practical therapeutics and is presented as an aid to study. Cases are reported of pellagrous dermatitis traceable to deficient diet, cured by correcting the diet. A study was made at Birmingham, Alabama, involving dietary deficiencies; 893 cases. There were 377 cases of pellagrous dermatitis; 531, conjunctival injection; 330, edema of the tongue; 102, paresthesias of the leg, to mention a few. Diets are given.

The book is a really interesting study.

NUTRITIONAL AND VITAMIN THERAPY IN GENERAL PRACTICE. By Edgar S. Gordon, M.D., Ph.D., Associate Professor of Medicine, University of Wisconsin. Chicago: The Yearbook Publishers, Inc., 1947. Price \$5.00.

This is a handbook on the subject of nutrition and vitamin therapy. Chapters are devoted to the various vitamins, their source in food, the symptoms and diagnosis

of their deficiencies. There are also chapters about the various items of nutrition, minerals, fat, carbohydrate, proteins.

The fuel foods receive attention, as well as weight control, dental problems and a special chapter on the economic side of clinical nutrition. This is about the most useful book we have seen on the vitamins and their actual understanding. It is well worth a place on the doctor's shelves.

ESSENTIALS OF ENDOCRINOLOGY. By Arthur Grollman, Ph.D., M.D., F.A.C.P., Professor of Medicine and Chairman of The Department of Experimental Medicine, The Southwestern Medical College; Attending Physician and Consultant in Endocrinology, The Parkland Hospital, Dallas, Texas; Second Edition, Revised and Enlarged. 132 illustrations. Philadelphia: J. B. Lippincott Co., 1947. Price \$10.00.

This book is a complete exposition of what is known and usable in medical practice regarding the so-called endocrine glands: the hypophysis-anterior lobe, posterior lobe, the pineal body, the thyroid, parathyroid glands, the thymus, the pancreas, the adrenal glands, the hormones of the reproductive organs, and hormones from non-endocrine organs. The pituitary and its effects on the human body and behavior when not normal is a fascinating and compelling study as well as a necessary part of our armamentarium. The same is true of the thyroid, and the late work on sex hormones is just as revealing. This book is the best exposition of endocrine study, effect and therapy we have seen.

OBSTETRICAL PRACTICE. By Alfred C. Beck, M.D., Professor of Obstetrics and Gynecology, Long Island College of Medicine, Obstetrician and Gynecologist-in-chief, Long Island College Hospital, Brooklyn. More than one thousand illustrations. Fourth Edition. Baltimore: The Williams & Wilkins Co., 1947. Price \$7.00.

Primarily written for the undergraduate students and younger practitioners, the essentials and principles of obstetrical practice are always foremost, advocating and describing the well-tryed and safe procedures, both for mother and child. Prenatal care is especially emphasized. The anatomy, diagnosis, measurements and the

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mechanism of labor are extensively discussed and profusely illustrated. Toxemias and their treatment get sufficient attention. Also discussed are complications and their management, with concise description of forceps delivery, versions, cesarean section and methods that have proven safest and most satisfactory. A new chapter is introduced on analgesia, amnesia and anesthesia, and it is conservative. Biotics and chemotherapy as they apply to obstetrics, syphilis in the mother, et cetera are included. A very satisfying text.

PRACTICAL PHYSIOLOGICAL CHEMISTRY. By Philip B. Hawk, Ph.D., President, and Bernard L. Oser, Ph.D., Director, Food Research Laboratories, Inc., New York; and William H. Summerson, Ph.D., Associate Professor of Biochemistry, Cornell University Medical College, New York. 12th Edition. 5 color plates; 329 illus.; 1323 pages. Philadelphia: The Blakiston Co., 1947. Price \$10.00.

This standard and long-used textbook on physiological chemistry has been entirely rewritten in the light of recent advances in laboratory methods, investigative research and new discoveries. The structure of the protein molecule, the basis for all physiological chemistry, is well illustrated, including the simplest forms and the additions

which build up to our complicated albumins with their side chains. Throughout the book new chemical entities are diagrammed as well as giving the formulas. Blood analysis has much new material, methods and text. A very considerable part is devoted to vitamins and deficiency disease.

This book is necessary for every laboratory, private hospital or commercial.

PHYSICIAN'S HANDBOOK. Fourth Edition. By John Warkentin, Ph.D., M.D., and Jack D. Lange, M.S., M.D., Chicago: University Medical Publishers, 1947. Price \$1.50.

This is a convenient small handbook about 4 inches wide, consisting of 282 pages printed in reduced size typewriter type. It covers laboratory techniques, skin tests, sero-diagnosis, parasites, basal metabolism, what to do in diabetic emergencies or hemolytic shock. It tells how to do a lumbar puncture and gives an interpretation of the Widal test. It is a compend of the laboratory and investigation things to be done in making a diagnosis, compact, and may be carried in the pocket.

RH . . . ITS RELATION TO CONGENITAL HEMOLYTIC DISEASE AND TO INTRAGROUP TRANSFUSION REACTIONS. By Edith L. Potter, M.D., Ph.D., Assistant Professor of Pathology, Department of Obstetrics and Gynecology, The University of Chicago and the Chicago Lying-In Hospital. Chicago: The Year Book Publishers, Inc., 1947. Price \$5.50.

Dr. Potter has made this new subject clear and timely. The Rh factor was discovered in 1941, and its meaning and control have been an ever-present problem. This Rh factor has given the answer to some strange manifestations. The material in this volume is based on studies of about 40,000 mothers at Chicago Lying-in Hospital, covering 170 deaths from hemolytic disease over a period of twelve years. Any doctor doing obstetrics must have the information contained in this book, which is well presented. For those wishing a more extended study, there is a bibliography of 794 references. Practically a must, if one is to be well informed.

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